

The Mining Journal

AND COMMERCIAL GAZETTE.

No. 38.—Vol. II.]

LONDON: SATURDAY, MAY 14, 1836.

[PRICE 7D.]

SHARES IN MINES.—For Sale (only a few remaining) in the following well-conducted Mines, but which, not being speculative, are not so generally known to the public, and will, therefore, be sold at a low price:—
Four 1000ths in East Croft.
Four 1000ths in Copper Bottom.
Twenty 1000ths in Redfish.
Twenty 1000ths in Tin Croft.
Twenty 1000ths in Tamar Concess.
And shares in most of the English MINES and RAILWAYS, at the Office of **GEORGE MANN**, share broker, 7, Old Broad-street.

MINE SHARES.—**WILLIAM TRENNERY, jun.**, Mine Agent and Share Broker, from Redruth, Cornwall, respectfully informs his friends and the public, he has on sale Shares in the most productive Mines, which are paying excellent dividends, and further assures those parties who may favour him with their commands, they may rely upon his utmost to promote their interests.

Letters addressed, post paid, to him at his office, 38, Threadneedle-street, London, will be punctually attended to.
1-1200ths in the Mudi Mine.
3-1200ths in East Pool.
1-1200ths in Wheal Providence.
1-1000ths in Wheal Seton.
10 shares in North Consolidated Mine.
30 shares in Wheal Gilbert.
8-2400ths in Wheal Ellen.
2-1000ths in Copper Bottom.
2-2500ths in East Redfish.
1-1200ths in Great Wheal Tregus.
1-1000ths in Marazion Mines.
30 shares in Trellech Concess.
10 ditto in Redruth United.
25 ditto in West Wheal Brothers.
1-600ths in South Wheal Bassett.
And various other shares too numerous to insert.
May 13, 1836.

CITY RAILWAY SHARES.—a few for Sale; also Gibbs's Shares in the following Mines, viz. East Cornwall silver, West Wheal Brothers, South Wheal Lohr, East Wheal Brothers, New South Mine, North Cornwall, St. Hilary, Redruth, Polgoth, &c. &c. Applications (if by letter, to be post paid) to J. Day, John's Coffee-house, Cornhill, where attendance will be given daily, from one to two.—N.B. Shares bought, sold, or exchanged.

VALUABLE MINES.—To be Sold by Private Contract, ALL THE MINES OF THICK COAL, Heathen Coal, Gubbin Ironstone, and White Ironstone, in and under an estate called THE YEW-TREE FARM, in the parish of Bowler-Keris, in the county of Stafford, containing Thirty-one acres or thereabouts, within 150 yards of the Northerton Canal. For further particulars, application may be made to J. G. Bourne, Esq., solicitor, Dudley.

THE MINING JOURNAL, and the Provincial Papers from KERRY COUNTY, also Scotch, Irish, Guernsey, and Jersey, &c., are regularly sent at DEACON'S COFFEE-HOUSE and General Advertising Office, 3, Walbrook. Advertisements promptly transmitted to the Country Papers without extra charge. A printed list of the Newspapers may be had.

DENBIGHSHIRE IRON and COAL COMPANY.—Notice is hereby given, that the Certificates of Shares are now ready for delivery, and may be had at the Company's office, 17, Ironmonger-lane, London.
By order of the Directors,
ROBERT ALOYSIUS WORMAN.
7th May, 1836.

TRELEIGH CONSOLIDATED MINES.—Notice is hereby given, that an Instalment of TEN SHILLINGS per share, pursuant to the regulations contained in the scrip certificates, will become due the 1st of June next. The shareholders are requested to pay the same to the Bankers, Messrs. Vere and Co., Lombard-street, or Messrs. Major, Turner, and Co., Truro; and all shares upon which the said instalment shall not be paid within fourteen days from the said 1st of June, will be liable to forfeiture.
The Bankers' receipts, with the scrip certificates, are to be left at the Company's office, 21, Threadneedle-street, one clear day, that the payment may be certified thereon.
J. BAWDEN, Secretary.

EAST CORNWALL SILVER MINING COMPANY.—Notice is hereby given, that the Managers of this Company have made a further CALL of TEN SHILLINGS per share, which the shareholders are accordingly requested to pay on or before the 4th day of June next, to the Bankers of the Company, Messrs. Boscawen and Co., 73, Lombard-street.
All shares on which the said instalment of Ten Shillings per share is not paid within one calendar month after the said 4th of June next, will be liable to forfeiture, conformably to the conditions endorsed on the Scrip Certificates.
By order of the Managers,
HENRY THOMAS, Sec.
1, Cushion-court, Old Broad-street, May 11.

POLBREEN TIN and COPPER MINING COMPANY.—Notice is hereby given, that the Directors of this Company have called for a further instalment of TEN SHILLINGS per share, which the shareholders are accordingly requested to pay to Messrs. Boscawen and Co., 73, Lombard-street, on or before the 4th day of June next.—All shares on which the above instalment of One Pound per share is not paid within one calendar month from the said 4th of June next will be liable to forfeiture.
By order of the Directors,
HENRY THOMAS, Sec.
N.B.—The Directors have great satisfaction in acquainting the shareholders, that the present call is chiefly required for the immediate erection of efficient machinery for stamping the tin and copper ores, the present state and prospects of the Mine fully warranting such outlay.
1, Cushion-court, Old Broad-street, May 10.

ALTEN MINING ASSOCIATION.—In pursuance of the power vested in the Directors of this Association, they do hereby make a call on the shareholders of £2 per share; and request the same may be paid to the Bankers of the Association, Messrs. Williams, Deacon and Co., of Birch-lane: the first instalment of £1 on or before the 20th day of May next; and the second instalment, also of £1, on or before the 20th day of July following. The Bankers' receipts, together with the certificates of Shares, should be left at the office of the Association, in Winchester House, Old Broad-street, two clear days, that the payment of the instalments may be inscribed thereon.
JOHN LABOUCHERE, Chairman.
Winchester House, April 18, 1836.

CAUTION.—Notice is hereby given, that the Owners and Proprietors of Tin Boulders, situate in the Duchy Manor of Helston, in Herrer, and the parish of Wendron, are ready to grant Setts or Licenses to any respectable Adventurers who will effectually work the same; and all persons are cautioned against taking any sett or license from HENRY CREESE, Esq., or his agents, in the said manor and parish, without previous application to the Tin Boulders, who possess the accurate right to grant setts therein.
In case any person shall, after this Notice, commence mining operations, or continue to work without the consent of the Tin Boulders, or their agent, legal measures will be adopted against them, and the Tin raised within such Tin Boulders will be seized and taken possession of for the use of the Boulders.
Smelters and others purchasing Tin are liable to account for the same to the lawful owner, although they may have paid a full price for the same.
Dated Helston, April 16, 1836.
JOHN SILVESTER, Agent for the several Tin Boulders in the manor and parish aforesaid.

CUBA BANKING COMPANY.—CAPITAL £400,000.
DIRECTORS: Edward Blount, Esq., George Brown, Esq., Sir Robert Campbell, Bart., Oliver Farrer, Esq., Sir Andrew Green, Bt., Samuel E. Magan, Esq., Richard Norman, Esq., Thomas Nelson, Esq., Edward Stewart, Esq., John Wright, Esq.
With power to add to their number.
This Company has been formed for the purpose of carrying on the business of Banking in all its branches, in the Havannah; and also, should it be deemed expedient, in other principal towns of the large and populous island of Cuba. A License or Charter has been obtained from the competent Local Authorities, which, by the established Commercial Code of Spain, limits the responsibility of the Shareholders to the amount of the shares that may be held by them respectively.
The Capital, consisting of £400,000, will be divided into two distinct series of £200,000 each series composed of 8,000 shares, of £25 per share; of which 1000 will be reserved for allotment amongst parties resident in, or connected with, the trade of Cuba.
The First Series will be issued immediately, and must be paid up as follows, viz.:—A deposit of £7 per share on allotment; £6 on October, 1836; £5 in January, 1837; and £2 in April, 1837.
The Second Series will be issued when the development of the Company's affairs shall appear to warrant the advantageous employment of an increased capital.
The Directors have appointed Messrs. Wright and Co., Bankers; and Messrs. Fraser and Co., Solicitors of the Company.
Applications for shares may be addressed to the Secretary, at the temporary office, 6, Broad-street, London; but negotiations through a Director will be preferred. Prospectuses may be had, and every requisite information obtained, at the office.
H. S. ROBERTS, Secretary.

THE MINING REVIEW.

The forthcoming Number of this work will undoubtedly be delayed a few days longer, in consequence of the numerous Woodcuts required for illustrating several Original Papers; the publication of the MINING JOURNAL (directing its attention particularly to Public Companies) having determined the Editor to render the MINING REVIEW more exclusively devoted to Science, and so far as is practicable, to render it unique by numerous Engravings and Woodcuts.

Contents of No. VII. of the MINING REVIEW:
ORIGINAL COMMUNICATIONS.—On Mining Companies.—Descriptive Notice of the Consolidated and United Mines.—Comparative View of Celebrated Mines in Europe and America.—Parallel between the British and Continental Methods of Copper Smelting.—On the Geological Position of Rocks, and in the Separation of Gold from the Ore at Ganga, in Brazil.—On the System of Amalgamation pursued at the Hacienda of San Pedro Nolasco, in Capatzen.—Miscellaneous.—NOTICES OF RECENT PUBLICATIONS.—NEW COMPANIES FOR WORKING MINES.—PROCEEDINGS OF PUBLIC COMPANIES.—CORRESPONDENCE FROM MINING DISTRICTS.—APPENDIX.

THE MINING JOURNAL AND COMMERCIAL GAZETTE.
The only Newspaper exclusively devoted to Geology, Mineralogy, and Metallurgy; containing therewith Reports of the Proceedings of Public Companies, Correspondence from the Mining Districts, Sales of Ore, Prices of Shares, Mines, Railways, Canals, &c., with Parliamentary Summaries, London Gazette, and much original and interesting Scientific Intelligence, &c. is published every Saturday, and may be had of all newspapers in town and country.
Sold by W. C. Lippin, 11, Old Bailey, and by Messrs. T. Smith and Sons, Birmingham, who supply the trade.
Office, 12, Gough-square, Fleet-street, London.

UPTON AND ROBERTS' PATENT SAFETY LAMP.—The perfect safety of this Lamp has been proved by the chemist, the miner, and a Select Committee of the House of Commons, by tests which neither the Davy Lamp, nor any other proposed Safety Lamp, could sustain; it can, therefore, be recommended to the Miner as a protection, under all circumstances—there are no exceptions. It is presumed that none will be so foolish as to incur the awful responsibility of exposing the lives of their workmen to a dreadful, and now, happily, unnecessary peril. This Lamp gives three times the light of the Davy Lamp.
Sold by W. C. Lippin, 11, Old Bailey, and by Messrs. T. Smith and Sons, Birmingham, who supply the trade.

ROYAL CORNWALL POLYTECHNIC SOCIETY.—The liberal assistance of the nobility and gentry of the county is respectfully, and earnestly, solicited towards the Funds required for the erection of a large room, to accommodate the increasing exhibitions of the POLYTECHNIC SOCIETY. Subscriptions will be received by the Treasurer, Wm. Gibbs, Esq., Falmouth, by the Secretaries, and by the Bankers in the various towns of the county.
LOVELL SQUIRE, Jan. Secretaries, Falmouth.
THOMAS B. JORDAN, do.
Subscriptions already reported:—
John H. Tennyson, £10 0 0
Lewis Ed., £10 0 0
Henry English, Editor of the Mining Journal and Mining Review, £5 0 0
Smaller subscriptions, £5 0 0

GLOUCESTER, ROSS, AND HEREFORD RAILWAY.—With a BRANCH to the FOREST OF DEAN, and in continuation of the Gloucester, Cheltenham, and London Railway.
To be incorporated by Act of Parliament.
Capital £400,000, in 8,000 Shares of £50 each. Deposit £2.
Prospectuses will be ready for delivery on Wednesday, the 10th inst., and may be obtained of Mr. G. M. Boyes, Secretary pro tempore, King William-street, City, or of G. G. Jones, Esq., Solicitor to the Company, 11, Gray's-inn-square. No applications for shares will be received after Twelve o'clock on Saturday, the 21st inst., on which day the Provisional Committee will proceed to allot the shares.
G. M. Boyes, Sec. pro tempore.

THE HAYLE RAILWAY COMPANY.—Office, Rectory House, London-wall.
Notice is hereby given, that at a Meeting of the Board of Directors of the Hayle Railway Company, held at the Office of the Company, as above, on Wednesday, the 27th day of April, 1836, it was resolved unanimously, that a CALL of TEN POUNDS per share be now made payable, by two instalments—viz. £5 per share on or before the 20th of May next, and the remaining £5 per share on or before the 25th of June next; the same to be paid to Messrs. Ransom and Co., the Bankers of the Company.
HENRY ENGLISH, Secretary.
27th April, 1836.

THE CITY AND RICHMOND RAILWAY.—To unite the Birmingham, Great Western, Southampton, proposed Brighton, Dover, and the South-Western Railways with the City of London and the River Thames, with a Branch to Richmond.
To be incorporated by Act of Parliament.
Capital £100,000, in shares of £50 each. Deposit £2.
DIRECTORS:
Albert W. Beetham, Esq., F.R.S.
Admiral Maitland
Richard Cooke, Esq.
Major Macnamara, M.P.
The Hon. F. W. Molineux, M.P.
Frederick Polhill, Esq., M.P.
Sir William Russell
John H. St. Leger, Esq.
John Henry Walker, Esq.
Messrs. Whitmore, Wells, and Whitmore, and Messrs. Ransom and Co.
Solicitors—Francis Beetham, Esq.
ENGINEERS—William Laxton, Esq., and Charles J. Hunt, Esqs.
The shareholders are acquainted, that the Bankers' receipts may be exchanged for the scrip shares on applying at the Company's office, between the hours of ten and four.
D. Mansion-house-street, City. J. BINNS, Secretary.

THE SHROPSHIRE RAILWAY.—from Wolverhampton, through or near Shifnal and Wellington, to Shrewsbury, with a branch to Colebrook Dale, connecting by railway communication the town of Shrewsbury and the important neighbouring districts with Birmingham, Wolverhampton, and London.
Capital £200,000, in 12,000 Shares of £16 6s each. Deposit £2 a share.
With power to add to their number.
William Anstee, Esq.
Henry Bainbridge, Esq.
George Peakes Barclay, Esq.
William Bodford, Esq.
John Carline, Esq.
Richard Darby, Esq.
Richard Dickinson, Esq.
Michael Goodall, Esq.
William Henry Griffiths, Esq.
George Holyroake, Esq.
William Horton, Esq.
John Horton, Esq.
Edward Haycock, Esq.
George Stephenson, Esq.
Messrs. Puget, Bainbridge, and Co., St. Paul's Churchyard, London; Messrs. Barton, Lloyd, Salt, and How, Shrewsbury; and Messrs. Fritchard and Sons, Bromley.
George Barker, Esq., Gray's-inn-square, London; and Messrs. Williams and Ford, the College, Shrewsbury.
This Company was originally projected under the title of "The Great Irish Railway Company," with the view of carrying a line of railway from Wolverhampton to Shrewsbury, and from thence through North Wales to Holyhead or Fortunian, as might be deemed, in the opinion of eminent engineers and other persons best acquainted with the country, to be the most practicable of attainment, and most likely to repay the subscribers to so great and important an undertaking. The projectors, however, having ascertained the serious impediments to crossing North Wales to either of those harbours by a steam conveyance, have determined, under present circumstances, not to extend their line beyond the town of Shrewsbury during the next session of Parliament.
The proposed Railway will branch off from the Birmingham and Liverpool Junction Railway, at a short distance from Wolverhampton, and avoiding all gentlemen's pleasure grounds, will pass near the towns of Shifnal and Wellington, and a branch will be carried from the main line to Colebrook Dale or Iron-bridge.
This district of the county is one of great population, abounds in natural mineral productions and extensive manufactures, and the travelling through these towns is in itself of sufficient importance to render a communication with Shrewsbury by railway highly desirable as a public convenience, and at the same time to hold out to its promoters, fair views of profitable investment of their capital.
The leading objects of the Provisional Committee will be to ensure, under the advice of the engineer, the most eligible and least expensive line; to realize for the subscribers to the undertaking an ample profit for the outlay; and to confer a benefit upon the public by this increased means of communication with remote parts of the country.
The principal landowners along the line, and the leading manufacturers of the county have been consulted upon this undertaking, and are favourable to its adoption. An Act of Parliament will be applied for in the next session, with their concurrence to carry it into effect.
Applications for shares may be made to either of the Bankers or solicitors above named: to Messrs. Hunt and Sons, solicitors, Birmingham; George Robinson, Esq., solicitor, Wolverhampton; William Rock, Esq., solicitor, Wellington; Andrew Phillips, Esq., solicitor, Shifnal; Mr. King, sharebroker, Liverpool; Messrs. Cresswell and Sons, solicitors, South; or Mr. Lewis, sharebroker, Bristol.—Prospectuses are ready for delivery, and may be had from either of the Bankers or solicitors above named.

TO CONTRACTORS.—PRESTON AND WYRE RAILWAY

AND HARBOUR COMPANY.
Incorporated by Act of Parliament.
Notice is hereby given, that the DRAWINGS and SPECIFICATION for the erecting a PIER at BURN NAZE, are now READY for INSPECTION at the Company's Office, where they will lie for seven days, and they will afterwards be forwarded to the office of Messrs. Winstanley and Co., Solicitors, Preston, where they will also remain for seven days.
Tenders to be delivered, signed and sealed, and addressed "to the Directors of the Preston and Wyre Railway and Harbour Company," on or before the 1st day of June next.
36, Cornhill, 12th May, 1836. OWEN T. ALGER, Secretary.

HAYLE AND PENZANCE RAILWAY.—THE PROSPECTUS of this Company is now READY for DELIVERY. Applications for same and for shares to be made (if by letter, post paid) to Messrs. Bonnett and Paul, solicitors, 30, Backhouse, London; Mr. Thomas Hanway, at Cherry-street, Birmingham; and to Mr. R. E. Tippet, solicitor, Marazion, Cornwall.

EAST AFRICAN COMPANY, for Trading and Founding Settlements, and promoting Civilization, chiefly on the SOUTH-EASTERN COAST OF AFRICA.
Capital £200,000, with power to increase it to £500,000. In 80,000 shares of £25 each. Deposit £10s. per share. No call to be made at a less interval than three months, exclusive of twenty-one days' notice.
N.B.—Not more than one call will be made (if any). All accounts are received from the first week. A detailed prospectus, with the names of the Provisional Committee, will be issued in a few days.
Applications for shares, in the interim, may be forwarded to the temporary offices of the Company, 4, Adam-street, Adelphi, where the preliminary prospectus may be immediately obtained.

SOUTH AFRICAN COMPANY.—APPLICATIONS for SHARES will be received up to THIS DAY (the 14th instant). They may be addressed to the Directors, under cover, to Edward Pym, Esq., 26, Essex-street, Strand; or to the Secretary, at the Company's office, 9, King's Arms-yard, Coleman-street.
By order of the Directors,
L. J. MACKINTOSH, Secretary.

THE FOREIGN BANKING COMPANY.

82, LOMBARD-STREET.
Capital £1,000,000, in 10,000 shares of £100 each.
First instalment £25 per share.
BANKERS—Messrs. Boscawen, Aldrich, and Co.
The business of this Company will consist chiefly in receiving deposits of cash and bills, for the purpose of effecting payments, through the agency of bankers or respectable mercantile houses, at all the principal cities and commercial towns abroad.
In making payments and transacting pecuniary business in England for foreign correspondents.
In the issue of circular notes, payable by the Company's agents at any place where they may be presented, or by the bankers of the Company in London; thus supplying travellers and others with a circulating medium of unquestionable validity and of universal acceptance.
Applications for shares to be made to the Bankers, Messrs. Boscawen and Sons, solicitors, 3, Chancery-lane; or at the office of the Company, 82, Lombard-street.

PROSPECTUS FOR CONVERTING THE OLD ESTABLISHED BANK OF MESSRS. WALKERS AND STANLEY INTO A JOINT-STOCK BANKING COMPANY, to be called

"THE SHEFFIELD AND ROTHERHAM BANK."
Messrs. WALKERS and STANLEY, under the counsel of some of their friends, who have long honoured them with their confidence, have agreed to convert their Banking Establishments, at Sheffield and Rotherham (which have been in prosperous existence for nearly half a century), into a JOINT-STOCK COMPANY, upon terms of which the following is an outline:—
The Capital to be £600,000, divided into 24,000 Shares, of £25 each, and to be appropriated as follows:—
One-fourth to the present Partners at Par.
One other fourth to such customers of the Bank, as may wish to take them, at a premium of Ten Shillings per share. To be allotted according to their accounts.
One fourth to the Public, at a premium of £4 per share.
And the remaining fourth to be reserved, and left to the disposal of a Board of Directors, for the general benefit.
Out of the premium to be raised by this disposal of shares, and the general funds, the present Partners to receive £77,000, as a consideration for the benefit to arise from their old established connexion.
A first instalment of £2 10s. per share (together with the premiums) to be paid when the shares shall be allotted, and future calls to be made at such periods as the Directors for the time being shall determine.
The Company to be considered as constituted, and the change from a Private to a Public Bank, to take place at a part of £5 to be decided upon by the Provisional Committee, who will also, until they shall have appointed Directors, make all the necessary minor arrangements.
The Board of Directors will have the general superintendence of the affairs of the Company, but the individual accounts of the customers will, for the first year, remain under the exclusive superintendence of the present Partners.
The names of the Directors, and the other necessary information, will be given as soon as the arrangements can be perfected.

SHEFFIELD AND ROTHERHAM BANK.—A Report having been circulated that the Joint-Stock Company about to be founded upon Messrs. Walkers and Stanley's Bank will be required to adopt the best mode of that concern, the Provisional Committee beg to announce, that Messrs. Walkers and Stanley will not only withdraw all bad or doubtful debts, but guarantee every overdrawn account now on their books, for a period of six months from the commencement of the Joint-Stock Company. The period for receiving applications for shares from customers will close on the 10th instant, and for the others on the 31st instant.
By order of the Provisional Committee,
SHEFFIELD AND ROTHERHAM BANK, BROOKFIELD and GOULD, Solicitors.
SHEFFIELD—Messrs. Brookfield and Gould, and Mr. Bernard John Wake, of Sheffield.
Applications for shares to be made by letter post paid: to the Banks at Sheffield and Rotherham; to Messrs. Edward Ellis and Co., 33, Threadneedle-street, London, or to the Solicitors at Sheffield.
Sheffield, May 6, 1836.

THE THAMES TUNNEL, opposite the end of Old Gravel-lane, Wapping, bet on the Surrey side of the River, near Rotherhithe Church.

THE WORKS ARE NOW IN PROGRESS.
NOTICE IS HEREBY GIVEN, that the Public may view the Tunnel every day (Sundays excepted) from Nine in the morning until dusk, upon payment of One Shilling for each person. The Archway is brilliantly lighted with gas, and the Eastern Arch is open to the inspection of visitors, in addition to the Western one. The work, which extends upwards of 450 feet under the bed of the River, is perfectly dry, and the descent by a safe and easy staircase.
By Order, J. CHAMBERLAIN, Clerk of the Company.
N.B.—There are conveyances to and from the Tunnel, by an Omnibus, every half-hour from Gracechurch-street, and three times daily from Charing Cross, and the Green Man and Owl, Oxford-street; also by the Greenwich and Woolwich Steam Boats, from Hungerford Market, Queenhithe, and Fresh Wharf, at 9, 11, 2, and 4 o'clock.
Walkbrook-buildings, Walkbrook, May 14, 1836.

SOUTH AUSTRALIAN COMPANY.

15, BISHOPSGATE STREET WITHIN.
Capital £400,000, in Shares of £50 and £25 each.
With power to increase it to £1,000,000.
DIRECTORS: G. F. Angus, Esq., Chairman; Charles Hindley, Esq., M.P.; James Hyde, Esq.; Henry Kingdon, Esq.; John Pirie, Esq.; Alderman; Robert Currie, Esq.; Alderman; D. T. Johnson, Esq.; Alderman; Messrs. Messers. Ladbrooke and Co.; Solicitors—Messrs. Bartlett and Benthams; COLONIAL MANAGERS—Samuel Stephens, Esq.; SECRETARY, pro tem.—Edward Hill, Esq.
London, 9th May, 1836.
The whole of the capital of £400,000 necessary to constitute the Company having been subscribed for, in order to set the application from persons in the country, a limited number of shares of £25 each will be issued, at a premium of £1 per share, on which an instalment of £2 10s. will be payable on or before the 1st of July, 1836, and a second instalment of £3 10s. will be payable on or before the 1st of October, 1836. No further call will be made on those shares until after the 1st of January, 1837. The premium of £1 per share to be paid at the time of application for the Certificates, which the Directors are now ready to receive. The original shareholders will be entitled to a half-year's dividend of £4 per cent. per annum, payable to them on the 1st of July, 1836, and the holders of the new shares, as well as the original shareholders, it is divided at the same rate on the 1st of January, 1837; both dividends, exclusive of any bonus which the Directors may be able to declare from the surplus profits of the Company. Applications for shares to be addressed to EDWARD HILL, Esq., Sec. pro tem.

COAL.

ANTHRACITE.

Glance coal and Columbian coal of Werner, Kilkenny coal, Blind coal, Caim.
This is a species of coal distinguished from common coal by its higher specific gravity, its semimetallic lustre, and by its burning without emitting smoke; though, when it contains moisture (as is frequently the case), it emits a low yellow flame.

The colour is black; the lustre splendid and semimetallic. Sometimes beautifully iridescent. It is opaque, and breaks usually with a conchoidal fracture. Hardness about 2. In general it is rather harder than common coal; though this is not always the case.

Specific gravity of the Pennsylvania coal, which belongs to this species, from 1.52 to 1.55; that of Rhode island 1.75. (Silliman's Jour. x. 333.) I found that of Kilkenny coal 1.4354. Mohs states the specific gravity of the columbian coal from Meisner, to be 1.400, and that of the glance coal from Schönfeld, in Saxony, 1.482.

I have never seen it under any regular form. But Hany states that it has been met with in the coal mines of Berg, on the right banks of the Rhine, in imperfect acute octahedrons. He considers the primary form to be that of the regular six-sided prism.

By friction when insulated, it acquires negative electricity.

Anthracite, when pure, consists almost entirely of carbon, in that black state in which it exists in charcoal. Kilkenny coal leaves, when burnt, 4 per cent. of ashes. Two varieties of anthracite, that of Lehigh, in Pennsylvania, and that of Rhode island, were analyzed by Mr. Vanuxem,* who found the constituents as follows:—

	Lehigh coal.	Rhode island coal.
Carbon	90.1	90.03
Water	6.6	4.90
Silica	1.2	2.14
Alumina	1.1	—
Oxides of iron and manganese ..	0.2	2.50
	99.2	99.57

Anthracite occurs occasionally in primary rocks. Thus Ramond found specimens of it in gneiss, on the table land of Troumou, in the Upper Pyrenees. It is much more abundant in transition rocks. The Lehigh coal in Pennsylvania extends in length 100 miles, partly along the Susquehanna river, till it is lost at Peter's mountain, a few miles above Harrisburgh. The mean thickness of this bed of anthracite is from 12 to 15 feet, though in some places it amounts to from 30 to 40 feet. It alternates with clay slate, mica slate, and a micaceous sandstone.† And Mr. Macure informs us, that the whole of that part of the country is transition.‡ A very extensive tract of anthracite occurs also in Rhode island. This coal has of late years been brought into common use in America. Anthracite occurs also in the common coal measures. This is probably the case with the Kilkenny coal in Ireland. It is certainly the case with the Welsh coal, so extensively used in the iron-works in South Wales. Many other localities of it in the common coal-beds might be pointed out, both in Great Britain and on the continent.

BITUMINOUS MINERAL COAL.

Brown coal, black coal, slate coal, moorcoal, jet, &c.

This very important mineral occurs in the earth, in beds usually alternating with slate clay and sandstone, and is employed very abundantly in this country as an article of fuel. A great number of different kinds have been described, but it will be sufficient if we notice the following sub-species, which constitute the common varieties in this country.

1.—CAKING COAL.

When this coal is heated, it breaks into a great number of small pieces. When the heat is raised to a certain point the coal melts, and all the fragments become united together in one solid mass. It is to this property that the name of caking coal is owing.

The colour is velvet black, or in some places greyish black. Lustre shining, resinous. The principal fracture is straight, slaty; the cross-fracture partly small grained uneven, when the lustre is only glistening; partly small conchoidal, when the lustre is shining. It is not uncommon to find in it thin seams, exactly similar to wood charcoal.

It is soft, and very easily frangible. The fragments have more or less of a cubic shape. Soils the fingers; specific gravity 1.269. It catches fire very readily, and burns with a lively yellow flame; but in consequence of its caking property it requires to be frequently stirred to admit the free ingress of air, otherwise it is extinguished. It is a lasting coal, and gives out much heat; but it requires care to manage it well in a common fire.

The best Newcastle caking coal contains 14 per cent. of earthy matter. The combustible portion is a compound of carbon, hydrogen, azote and oxygen, in the following proportions:—

33 atoms carbon, ..	24.75
11 atoms hydrogen, ..	1.375
3 atoms azote, ..	5.25
14 atoms oxygen, ..	1.5
	32.875

The principal beds in the Newcastle coal field consist of this kind of coal. It constitutes the sixth bed (reckoning from the surface) of the Glasgow coal field. The coal at Hurlet, about five miles south-west from Glasgow, is a caking coal. It occurs also at Bannockburn, and in various places in Fifeshire.

2.—SPLINT COAL.

This coal constitutes the fifth of the Glasgow beds, or the lowest bed at present wrought.

It is thin, varying from thirty inches to three feet. It occurs also occasionally in the other Glasgow beds, particularly the second. It is the most valuable of the Glasgow coal, and always sells at a higher price than the cherry or soft coal.‡

The colour is black, with a slight shade of brown. The lustre is between glimmering and glistening; resinous; lustre of the streak between glistening and shining. Thin layers of cherry coal often pervade splint coal; they are easily distinguished by their superior lustre.

The principal fracture is imperfect, curve slaty; cross fracture fine grained, uneven and splintery.

Soft, but difficultly frangible; much more so than any other species of coal. Hence the reason why the term *hard* coal is often applied to it. The specific gravity is 1.290.

It requires more heat to kindle it than either caking or cherry coal; but when once thoroughly lighted, it constitutes a lasting and clear fire, which gives out much heat.

The best splint coal which I have met with contains about 9.5 per cent. of earthy matter. The combustible portion is a compound of carbon, hydrogen, azote and oxygen, in the following proportions:—

28 atoms carbon, ..	21.00
14 atoms hydrogen, ..	1.75
1 atom azote, ..	1.75
34 atoms oxygen, ..	3.5
	28.00

3.—CHERRY COAL.

This constitutes the greater part of the four uppermost Glasgow coal beds, especially the third and fourth beds. The Staffordshire coal seems to be similar in its nature.

Colour velvet black, with a slight intermixture of grey; the lustre is sometimes splendid, sometimes shining. When the lustre is shining, the coal has exactly the appearance of caking coal; but is easily distinguished, as it wants the property of softening and caking when heated. The lustre is resinous.

Principal fracture straight, slaty. The different slates or plates differ in their lustre; some of them are splendid, others only shining. The surface is smooth; when the lustre is splendid the surface is specular, but when only shining, the surface is merely even. Cross fracture usually flat conchoidal and specular splendid. In some places it has occasionally the aspect of wood charcoal.

Its hardness is about the same as that of caking and splint coal. But it is very easily frangible. Hence there is a good deal of waste in mining it, and as it does not cake, the fragments can be used only for furnaces. Near Birmingham the loss in mining, including the pillars, amounts to two-thirds of the whole.

The fragments are rectangular, and approach the cubic form. The specific gravity is 1.265.

When exposed to heat it readily catches fire, and burns with a clear yellow flame, giving out a great deal of heat. It burns away much faster than either caking or splint coal.

When burnt it leaves about ten per cent. of ashes. The combustible portion is a compound of carbon, hydrogen, azote, and oxygen, in the following proportions:—

34 atoms carbon, ..	25.5
34 atoms hydrogen, ..	4.25
2 atoms azote, ..	3.5
1 atom oxygen, ..	1.0
	34.25

As this is the most beautiful, it is at the same time the most abundant species of mineral coal. It has got the name cherry, from the colliers, in consequence of its lustre and beauty.

4.—CANAL COAL.

This species of coal is said to have got its name because when kindled it burns with a clear flame like a candle. It abounds at Lismahago, about twenty miles from Glasgow. It is found in different parts of Ayrshire, where it is made into ink-burns, snuff-boxes, and other similar ornaments. It abounds, as is well known, at Wigan in Lancashire; there is a mine of it in Lord Anglesea's park at Beaudesert near Coventry. What is called *jet* is merely a variety of canal coal.

The colour is dark greyish black, sometimes brownish black; the lustre is glistening, resinous; it makes a good polish; the fracture is usually large and flat conchoidal. In the great kind of coal is frequently slaty.

In some varieties the fragments approach the cubic shape, in others they are wedge-shaped, or even quite irregular.

Soft; sectile; does not soil the fingers; rather difficultly frangible; specific gravity 1.272.

When applied to the flame of a candle it catches fire, and burns with a clear yellow flame, without melting. On this account it is frequently employed to give light, as a substitute for candles. If a large piece be put on the fire, it splits into folie, and if the flat side of these folie be laid over the fire, the pieces fly off with a crackling noise, and are, many of them, driven to a considerable distance. Hence the reason why the term *purvel* coal is applied to this variety in Scotland.

This coal at an average contains about eleven per cent. of earthy matter. The combustible portion is composed of carbon, hydrogen, and azote, in the following proportions:—

11 atoms carbon, ..	8.25
22 atoms hydrogen, ..	3.75
1 atom azote, ..	1.75
	13.75

5.—WOOD COAL.

As a variety of mineral coal, we ought to mention wood coal or brown coal, as it has been termed by Werner, which occurs usually in the newest formations; it has all the appearance of wood, and obviously consists of trees that have been softened, probably by moisture, and then squeezed flat by pressure. The deposit at Hovey, in Devonshire, constitutes one of the best examples of this kind of coal. Its colour is brown or grey, differing a good deal in the shade; the texture of the wood is preserved, and it burns exactly as wood does; so that there cannot be the least doubt about its origin. Indeed the common opinion is, that mineral coal in general owes its origin to vegetable matter; but the occurrence of anthracite in primary rocks constitutes a difficulty in the adoption of this theory in every other respect so plausible.

ASPHALT.

Black mineral resin of Mohs; bitumen, petroleum, naphtha, &c.
This substance occurs in considerable quantity on the shores of the Dead Sea, and on the surface of a lake in Trinidad. There is a thick bed of it in Albania, from which the Greek fire, so celebrated in the middle ages, was principally formed.

When solid it has a black colour, but is frequently also brownish and reddish. The streak is usually unchanged; but sometimes lighter than the colour of the asphalt.

Hardness 2. Friable; sectile; lustre resinous; fracture conchoidal, more or less perfect. The specific gravity varies from 1.073 to 1.160. Klaproth states it as high as 1.205.

When heated it melts, gives out a bituminous smell, and colourless naphtha may be distilled from it. Neither acids nor alkalis are capable of acting on it; but it dissolves in naphtha, and in the fixed and volatile oils.

Naphtha, which issues occasionally from the earth in various countries, especially Persia, is a colourless transparent liquid, very volatile, and of the weight of water. It is very combustible, and appears to be a compound of carbon and hydrogen in equal atoms, seemingly six atoms of each. When naphtha is exposed to the air, its colour deepens, and its consistency increases, and it gradually assumes the form of petroleum, a brown bituminous oily looking matter, which occasionally floats on the surface of springs issuing from coal beds. When the petroleum is heated, it gives out naphtha, and leaves a quantity of asphalt. Pit-coal, when distilled, yields also naphtha. Hence naphtha seems to be the part of a series of substances which graduate into each other, and the last of the series is pit-coal.†

ELASTIC BITUMEN.

Mineral caoutchouc of Kirwan.

This mineral was first discovered in the forsaken lead mine of Odin, which is situated near the base of Mamtor, to the north of Chastleton, in Derbyshire. It was first noticed by Dr. Lister, in 1673.‡ He called it a subterranean fungus, and is uncertain whether it belongs to the vegetable or mineral kingdom. It was first accurately described by Mr. Hatchett.§ In 1810, it was discovered by M. Olivier, of Angers, in the coal mine of Montreuil, at the depth of 230 feet. Hausmann states that it has been observed also at Neufchatel, and in the Isle of Zante.¶

Its colour is blackish brown of various shades. Internally it is shining and glistening; lustre resinous; fracture conchoidal; translucent on the edges; very soft; sectile; soft and elastic, flexible. The specific gravity of the Derbyshire variety, as determined by Hatchett, varies from 0.9053 to 1.233; that of the French is lighter than water.

It catches fire readily, and burns with a lively yellow flame, giving out a bituminous odour. The English and French varieties were subjected to analysis by M. Henry, jun.¶ The results were as follows:—

	English variety.	French variety.
Carbon	0.5225	0.5826
Hydrogen	0.0746	0.0489
Azote	0.0015	0.0010
Oxygen	0.4011	0.3675

This corresponds with

35 atoms carbon, ..	26.25
3 atoms hydrogen, ..	0.375
2 atoms oxygen, ..	3.000
	29.625

for the English variety; and

41 carbon	30.75
2 hydrogen	0.25
2 oxygen	3.00
	33

for the French variety.

It is obvious that these numbers can be considered only as rude approximations to the truth.—Thomson's Outlines of Mineralogy, Geology, &c.

PEAT.—Whatever be the cause of the antiseptic power of peat, it is well-known to have been the means of preserving not only the trunks of trees, but many interesting animal remains and objects of art. In June, 1747, the body of a female was discovered in a peat-moor in the Isle of Axholm, in Lincolnshire. Her feet were furnished with antique sandals, and it has been supposed that she was an ancient Briton. Her nails, hair, and skin, are described as having shown scarcely any symptoms of decay. In Ireland, a human body was dug up which was completely clothed with garments made of hair. The clothing of the inhabitants was manufactured from this material before the introduction of wool; but many ages have elapsed since this took place, so that the body must have lain an immense time, yet it was perfectly fresh and unimpaired. Amongst a number of cases of this description which might be brought forward, we shall quote the following, as particularly interesting:—At the battle of Solway, in the time of Henry the Eighth (1542), when the Scotch army, commanded by Oliver Sinclair, was routed, an unfortunate troop of horse, driven by their fears, plunged into this morass (the Solway moss), which instantly closed upon them. The tale was traditional, but it is now authenticated, a man and horse in complete armour having been found by peat-diggers in the place where it was always supposed the affair had happened. The skeleton of each was well preserved, and the different parts of the armour easily distinguished.† Besides the human body, there have been found in peat-bogs, bones of the stag, ox, hog, horse, sheep, and other animals that feed on herbs, and in Ireland and the Isle of Man, skeletons of a gigantic elk. There are no remains, however, of animals, such as the elephant and rhinoceros, which are only now to be found in warm countries. Upon this, Mr. Lyeil, one of our most able geologists, remarks, "that they had ceased to live before the atmosphere of this part of the world acquired that cold and humid character which favours the growth of peat."‡ This reasoning appears perfectly conclusive.—Chambers's Journal.

EXCHEQUER EQUITY SITTINGS, WESTMINSTER.

BRITISH IRON COMPANY.

SMALL F. ATTWOOD.

This long-contested cause was again brought before the Court of Exchequer on Saturday, April 30, upon exceptions taken to the interrogatories before the Master.—Mr. Knight, in support of the exceptions, contended that the inquiry ought not to have been directed beyond the net profits of the concern. The interrogatories framed were immaterial and irrelevant to the objects of the decree. Some of them presented a physical impossibility of being answered at all, while others were not within the compass of years, even in copying alone. Six of these interrogatories were directed to the colliery at Wolverhampton, requiring an account of all the iron-stone, coke, stock, &c., from September 30, 1835, distinguishing the quantity gotten between pay-day and pay-day, and quarter and quarter. The first of these interrogatories would afford employment more than sufficient for the ordinary duration of human life. If these interrogatories were allowed, every editor would be completely at the mercy of his adversary.—Mr. Wakefield supported the interrogatories.—His lordship, on coming into court on Saturday morning last, gave judgment. He said, that it was a case of exceptions to the certificate of the Master, in which he had allowed certain interrogatories to be put by the defendant, and the ground of those exceptions was, that the interrogatories were too minute, more so than was necessary, and were calculated to cause great delay, and to render it impossible for the Master to go through the inquiry which he was directed to make by the decree of the Court in a satisfactory manner. His lordship, after reading the order of the Court as to the particular objects which were referred to the Master for inquiry, was of opinion that, for the purposes of that inquiry, the Master was right in allowing the interrogatories. It had been said, that before such interrogatories had been allowed, a specific statement of facts should be given, but he did not think it requisite in this case. Here the Master was called on to make a minute inquiry into the various matters referred to in the decree, and to report thereon; it was therefore necessary that he should be furnished with every information. As to the difficulty of answering minutely the various interrogatories, he was of opinion that the Master should be satisfied with the best possible answer the parties could give. If they had been put in so minute a form as to appear to be wholly unnecessary, and for an other purpose than that of delay, he might have come to a different conclusion; but that did not appear to be the case here, for he saw no interest which either party could have in seeking for delay. Before giving his judgment, he had communicated with his noble and learned predecessor in that court, and it was a great satisfaction for him (Lord Abinger) to know, that he concurred with him in opinion that he did not think the interrogatories improper. The exceptions to the Master's certificate must be therefore overruled, with costs.

To give some idea of these voluminous proceedings, we subjoin the following particulars. The original Exchequer brief for counsel contained 4000 sheets. The examination of witnesses in the country, not to mention those who were examined in London, occupied above 100 days, or more than a quarter of a year. There are upwards of 250 letters proved in the cause, and more than 1100 account-books, accounts, and other exhibits or documents. Two accountants, employed by the plaintiffs, earned together 3000*l.*; and one accountant, employed by the defendant, about 3000*l.* The original hearing of the cause in the Exchequer occupied twenty-one days. The short-hand writers' notes filled 1700 brief sheets, and cost about 500*l.* The plaintiffs' bill of costs in the original cause, as delivered to the defendant, exceeded 10,000*l.*, but was reduced on taxation to something less than 10,000*l.* The printed cases and appendices for the appeal in the House of Lords, occupy six folio volumes; the case and appendix of the appellant occupying 500 folio pages, and containing as many words as about thirteen common-sized octavo folio volumes; while the case and appendix of the respondents would fill about twenty-five common-sized octavo volumes; making together about thirty-three such volumes as we find in an old octavo edition of Hume's "History of England." The part hearing of the appeal last session occupied seventeen days. The fees in counsel on both sides, on the partly-heard appeal of last session, amounted to about 11,000*l.* The total amount of costs on both sides, up to the present proceedings, is nearly 50,000*l.*; of which the appellant has actually paid about 40,000*l.*

EXTRAORDINARY CAVITY OR VUG IN DOLCOATH MINE.

Some years since, in prosecuting the operations in that part of Dolcoath commonly called Wheel Bryant, otherwise Wheel Killas, they discovered a large cavity, commonly denominated a Vug. This extraordinary fissure was ten fathoms long, seven fathoms high, and two fathoms four feet wide. The miners had for some time been annoyed by foul air, and on the discovery of the vug, it was necessary that a considerable period should be suffered to elapse before it could be entered. It required no small degree of nerve to be let down into this extraordinary production of Nature, but when let down, there was sufficient to satisfy the contemplative mind for its tenacity. The roof and sides appeared to be worked into every form and device which the most prolific imagination could either devise or desire, presenting in many parts the most beautiful, sparkling, and brilliant appearance. These consisted of very rich russets, coated yellow and purple copper ore, thickly interspersed with large, beautiful, and valuable specimens. On alighting at the bottom, in one part, there were a great quantity of large rocks, which had evidently fallen from the roof and sides. Seven of these rocks were of sufficient bulk to measure nine feet through; and there were hundreds of different smaller dimensions, with a great deal of other rubbish. In another part of it, under the level of these rocks, &c., lay a milk-white vapour, which formed a sort of floor, into which a foot or hand might have been thrust, but the unlucky wight who dared to sniff it, might calculate on making a speedy exit. A candle put into it was immediately and as completely extinguished as if it had been dipped into a pull of water. Several bottles were filled with this vapour, and taken to the surface for analysis, but with what result we have not been enabled to ascertain. The roof and sides were as very loose, that the largest rocks might have been cleft off with the greatest ease; several large pieces indeed appeared to be on the eve of falling on their own accord. The hole at some distance from the vug was very productive; but for some three or four feet before striking into it, it began to decline in quality, its size remaining much the same.

RAILROADS.—On Wednesday evening, the 27th ult., Dr. Lardner, president of the Southwark Literary Society, delivered a lecture to the members of the institution upon the interesting subject of railroads, in which he very minutely detailed the various processes by which the present improvement in locomotive engines had been obtained. Little was practically known upon the subject (said the Doctor) till the establishment of the Manchester railway, which may be looked upon as a sort of school for learning the power of locomotives, and for perfecting a knowledge of the properties of steam as applied to these engines. On this railway, rails were originally laid down at 35lbs. to the yard. The weight of the engines was only five tons, but now they are eleven, twelve, or fifteen tons weight. In fact, when the Manchester railway was first opened, the science was comparatively in its infancy. One of the most remarkable circumstances is the velocity that has since been acquired—which, in fact, came upon the world, including not only engineers but scientific men of every grade and denomination, like a miracle. Originally it was hardly contemplated that we ever could attain a greater velocity than thirty or thirty-five miles an hour—but Dr. Lardner stated that he had lately travelled at the rate of sixty miles an hour, actually performing fifteen miles in fifteen minutes. He could set on limits to the velocity to be attained by these locomotives, for it only required a sufficient power of steam to be applied, and they had machinery which would accomplish seventy or eighty miles per hour. He did not think it at all an improbable conjecture that, when the Birmingham railroad was completed, we should be able to travel the whole distance of 120 miles, in what is called the first-class train, in one hour thirty minutes, or even in one hour twenty minutes; and in the second-class trains at the very slow rate of forty-five miles per hour. At the conclusion of this interesting lecture, the Doctor exhibited the model of a steam-engine, connected with a train of carriages; but in endeavouring to set them in motion, the engine was accidentally overturned, thus causing the whole of the steam to escape in the lecture-room, to the partial fright and alarm of some of the females who were located near the lecturer.

FATAL ACCIDENT.—On Monday, the 2d inst., a fatal and melancholy accident happened in the Bradwell mine, Middleton, near Wickersham, to a person named Richard Goodwin. He was at work, doing what the miners call briggling, that is, filling the barrels and hanging them on to be drawn up the engine-shaft. Goodwin was at work at the end of one of these levels, and it is supposed, when in the act of pushing away the barrel, which he had just hung on, he slipped and fell to the bottom of the shaft, a depth of twenty-four yards. No person was with him at the time, and the men who were supplying him on coming to the shaft, and not finding him at his work, heard a groan as if from the bottom; and on descending, found the unfortunate man so dreadfully bruised with the fall, that he lived but a few minutes after they reached him. Agreeable with the mineral laws, an inquest was held over the body by Mr. Alsop, the barometer for the Wapentake of Wickersham.—Verdict, Accidental death.

* Annals of Philosophy, 2d series, xiv. 108.

† See a description by Mr. Clot in Silliman's Journal, iv. 1.

‡ Ibid.

§ Annals of Philosophy, xiv. 91.

¶ The difference is about one shilling per wagon, of 24 cwt.

Annals of Philosophy, xiv. 92.

Annals of Philosophy, xiv. 93.

* Annals of Philosophy, xiv. 94.

† From the late experiments of Bateman, naphtha appears to be a very complex substance; and Dr. Christison and Dr. Gregory have shown that two distinct species of natural naphtha occur.

‡ Philosophical Transactions, viii. p. 9779.

§ Linnean Transactions, iv. 146.

¶ Handbuch, iii. 278.

¶ Ann. des Mines, xii. 299.

ACCIDENTS IN MINES—DAVY LAMP.

(Continued from No. 54.)

Upon this important and still undecided subject, we now extract from the evidence given before the Commissioners of Parliamentary Inquiry, that part of the testimony of John Murray, Esq., lecturer on Chemistry at Hull, which relates to the safety lamp.

Having referred to a number of safety lamps, do you, as a scientific man, consider Sir Humphrey Davy's lamp to be emphatically a safety lamp in all cases?—No, I certainly do not; that is, not in all cases.

Will you give the committee your opinion on that subject, as the result of experiment or theory?—As the result, I should say, of direct experiment. I have no doubt that very many accidents have occurred with Sir Humphrey Davy's lamp, that lamp not being absolutely safe, igniting an explosive atmosphere. Of course I do not wish to enter into the theory, for I happen to differ with scientific men generally, and I would rather confine myself, if you please, to practical results. The accidents from the lamp, I conceive, are in the first place to be ascribed to the mere occasional use of the lamp. Taking it, for instance, as an exploring lamp, and suddenly encountering an explosive atmosphere, or perhaps passing a blower, the sudden entrance of an explosive atmosphere into the lamp would ignite it almost immediately, and I should think kindle the gas; in my experiments it has kindled the gas, by making the lighted lamp to transit, for instance, a jet of carburetted hydrogen; for it has passed through the lamp and ignited the gas at the orifice.

Now in that case, what was the estimated velocity of carburetted hydrogen taken in feet per minute?—I did not estimate exactly that, but I should conceive it to be not moving with any great velocity, certainly not so much as I have often known blowers to emit gas.

Can you give an idea whether it was at the rate of 300 feet or 400 feet or more per minute?—I should think less than 300 feet.

You think that pure carburetted hydrogen passed through the gauze of a lamp, will ignite it beyond the gauze; that is to say, impelled against the lamp, the flame will break through; 300 feet per minute would not be above three miles an hour walking, would it?—Not above that; of course that will depend, you know, necessarily on the size of the meshes.

You are now speaking of the standard gauze, or the gauze approved by Sir Humphrey Davy?—Yes, it is that I advert to.

Then, if a man were walking through a very explosive mixture, with his lamp unprotected, at the rate of three miles per hour, and the current of gas was setting towards him also at the rate of three miles per hour, the mere resistance of the gauze being four miles per hour, should you anticipate an explosion as a natural consequence?—I should.

Should you have any doubt as to an explosion taking place?—Not at all, because the flame is then impelled against the side of the gauze, and it acts then with all the impetus of a blow-pipe on that side. It is that which enhances the tendency to explosion.

This would be a practical experiment, confirming those which you have made as a man of skill?—Yes. There is another cause of accident with that lamp, which has not been alluded to. I believe I was the first that pointed it out. The indiscriminate use of copper and iron-wire gauze.

Have you seen copper gauze in use in those lamps?—Yes, I have; and I have seen them exposed in the windows of ironmasters indiscriminately. I was the first who made the experiment which proved the danger of the copper safety lamp.

Will you state what that experiment was?—I made the experiment with the fire-damp in the Bagillt colliery in North Wales. The fire-damp burned green, and possessed the green tint which it received by the solution of copper. The explosive flame was in actual contact with the copper tissue, which, when dissolved in the fire-damp, communicated a green tint to the flame within; a sufficient proof that the copper was dissolved.

Did you continue that experiment sufficiently long to ascertain what length of time would be required to oxidize the whole substance?—No; I did not continue it sufficiently long, but I am in the habit of repeating it for illustration. I suppose I have made the experiment more 100 times; and to prove it, we have only to immerse slowly a copper safety lamp in a portion of the vapour of ether mingled with atmospheric air, and will then find the whole cage full of a green-tinted flame; and, moreover, that the flame is in evident contact with the wire-gauze itself.

As the vapour of ether a natural combination of carburetted hydrogen?—I am talking of the carburetted hydrogen entering into the constitution of the flame, filling the cage and dissolving the copper tissue, and thus forming that green tint which is peculiar to a solution of nitrate of copper in alcohol when inflamed. The vapour of ether arises from a small portion of ether thrown into a large vessel, and when mixed with atmospheric air, the lamp is slowly lowered into it.

But is that a natural combination with carburetted hydrogen?—It appears that carburetted hydrogen always acts powerfully on copper tissues, and I have repeatedly proved the fact.

Will you explain your object in making experiments with an infusion of vapour of ether?—I have merely adverted to that as an easy experiment of proving the same thing, because the vapour of ether is an inflammable vapour, and when mingled with atmospheric air, forms an explosive compound. I am, moreover, of opinion, that M. Prevost has stated correctly that alcohol and ether are liquid combinations of carburetted hydrogen and hydrogen, so that I conceive it is an apt illustration of the same principle.

And these experiments carried conviction to your mind that copper gauze would on no account be allowable?—Certainly not. I had once nearly lost my life with it, the copper being nearly dissolved in repeated trials; but when I found out what was the cause of it, by investigation, I repeated it seldom, and not for a long continued time.

Now will you turn your attention to the iron-wire gauze?—With regard to the iron-wire gauze, I differ in opinion as to the cooling influence to which it is a cause has been ascribed, because I believe the lamp is dangerous when it is cool.

Perhaps you will give the committee your idea of the rationale of Sir Humphrey Davy's lamp as explained by himself?—Flame in all cases whatever is to be considered as inflammable vapour or gaseous inflammable matter, heated to a certain whiteness. The lamp simply acts by cooling that incandescent inflammable matter below the point at which it is incandescent, when it ceases to be flame. This is said to be a very simple explanation, but the question is come to whether that explanation be correct.

Now will you compare that view of the case with the one you have been led yourself to form?—The way that I explain the lamp is this, and I am warranted in my conclusions by the experiments of Mr. Dillon, of Belfast, irrespective of my own. Indeed I constructed a safety-lamp proving the fact I am about to state. It may be mentioned, that the fire-damp of the mine, when it forms from one-seventh to one-thirtieth part of the atmosphere, will explode, though beyond these limits it will not explode. If we mix a small portion of either acetylene or carbonic acid gas with such a mixture, it will no longer explode, or it will diminish it of explosion. I need not mention that the more highly concentrated an explosive mixture is made by condensation, the more violent will be its explosive effect when it is ignited. Now it occurs to me that, seeing the lamp is positively safe when it is heated, though unsafe when it is cold, the heated wire-gauze which confines the explosive flame within, will exercise its power by attenuation, because if we attenuate or rarefy such a mixture, whether by the air-pump or by heat, it will not explode. I cannot see how any cooling influence could operate where individuals have worked for many hours with the lamp red-hot, and I have myself had the lamp red-hot from top to bottom, yet remaining safe. I have gone through an explosive atmosphere in a colliery in the neighbourhood of Paisley; I cannot therefore discover wherein the cooling influence of red-hot gauze resides.

Do you attach no importance to the principle of external pressure on the gas preventing the flame passing?—I should conceive that it may have some influence; perhaps a great deal may depend also on that, but I cannot see what that has to do with the cooling influence to which the safety has been solely and exclusively attributed.

But whatever mistakes may have been made in the principle of Sir Humphrey Davy's, do you not think that the most reasonable conjecture is that the dangerous pressure from without is sufficient to resist the passage of the flame externally?—It is an idea which has not occurred to my own mind, but I should conceive it may very considerably operate.

Is not the consequence of the flame in the lamp to produce nearly a complete vacuum?—It will rarely if very materially.

And will not the pressure from without be increased in consequence?—But if it is more dense without, it would rush in by the meshes into the interior.

You are aware the lamp is attached to meshes?—Yes. Do you not think that the pressure of the air inwards prevents the flame from passing?—The pressure of the air inwards prevents the flame from passing, or the atmosphere from an inflammable state from proceeding out of the cage?—I think it highly probable it may very considerably influence the phenomenon.

But where the pressure on the opposite side of the lamp is neutralized by a blast through the lamp, does not the flame immediately pass?—Yes, I should certainly think it would.

Is not that an easy explanation of the theory on which you have just been questioned?—I was merely mentioning the fact; the theory I will resign to you, as having, perhaps, accounted for it better.

In what mines have you experimented with this lamp?—I have been in many mines, both in Scotland, Wales, and England.

Yn did not find much explosive gas in Scotland, did you?—No, not much.

And much less in Wales than in the counties of Durham and Northumberland?—I have never been in the mines in the neighbourhood either of Durham or Newcastle at all. I am quite unaware practically of the phenomena there.

Are you aware from report, that the explosions of gas in the coal seams of

Durham and Northumberland are infinitely greater than what is known in any other part of the kingdom?—I have no doubt of that whatever.

Then in your opinion ought the explosions which cannot be immediately traced to any defect in the lamp, to be attributed to the careless use of it?—I rather suspect that the workmen have often been blamed when they ought not to have been blamed. That is my own opinion, from what I have heard.

But what is your impression as to the ordinary causes of these lamentable accidents which are too well known to have taken place?—Do you advert to the accidents where the safety lamp has been in use?

Certainly?—I conceive that it has been chiefly from using it as an exploring lamp, by means of which the current would be impelled, in traversing the mines in the opposite direction; being an explosive mixture, it would act with all the force of a blow-pipe on the opposite side.

Are you aware of any mine having exploded in the act of exploration?—No, I am not.

Are you aware that the men using these lamps in exploring the mines, are always expected to protect their lamps with a tin plate to avoid the passage of the current, and that they carry the lamps close to their bosoms, thus preventing the passage of any current of air in the opposite direction to that which they are going?—I am not aware of that fact, and I rather suspect that is a very recent introduction.

If it has been stated by a witness conversant with the practice that such is the case, do you not consider that those are wise precautions?—Unquestionably, every precaution is valuable that would prevent the action of the current.

Then your opinion of the safety lamp not being a real and constant protection, applies to those times when it is used in a state of motion or ignition?—Chiefly so, because it is known they keep working with the safety lamp red hot for some hours together in Earl Fitzwilliam's collieries, and I have been also told in the neighbourhood of Bradford, where a coal proprietor informed me of the fact.

(To be continued.)

STATISTICAL NOTICES RESPECTING THE FALKLAND ISLANDS IN THE SOUTHERN OCEAN.

The Falkland Islands, named by the Spaniards "Malvinas," form a group of nearly ninety in number, two of which are very large, they are situated in the Southern Ocean, distant about 470 miles east of the coast of South America, and about 300 N. E. of Cape Horn, lying between the lat. of 51° and 52° S. and in long. 57° and 61° W.

West Falkland, the largest of the two islands, is at present uninhabited, and is about 100 miles in length and 50 in breadth, surrounded on all sides by excellent harbours, and of which Port Egmont on the N. is the most frequented, being very spacious and well sheltered by several islands lying at its entrance; it was at this place the English founded their first settlement in 1774; there is no cattle in the island, although the pasturage is excellent.

East Falkland, named "Soledad" by the Spaniards, is seven to twelve miles distant from West Falkland, and from which it is separated by an extensive sound containing numerous islands and rocks. This island is about seventy-eight miles in length, and forty-seven at its greatest breadth, but narrowing to twenty-five or thirty in the southern parts. Berkeley Sound is situated at the N. E. point, and is six to seven miles wide at the entrance, running up nearly twelve miles as far as Port Louis, where the British settlement is at present fixed; there is plenty of depth of water for vessels of any size in Berkeley Sound, with good shelter and anchorage, as well as every convenience for heaving vessels down and repairing them. The village of Port Louis is situated in lat. 51° 33' S. and 58° 18' W. long. on the banks of a small creek, with about six to eight feet water. There are about eighteen persons in all settled on the island, most of whom were from Buenos Ayres, when Lieutenant Smith with about ten or twelve seamen and marines took possession of the island, in the name of the British Government. A vessel of war is now generally stationed there as a further protection.

The country about East Falkland is of moderate elevation; but the western island is more hilly. The surface of the soil is of a peat nature, but capable of great improvement, and can be easily manured, as the coast abounds with sea-weed. The pasture even to the summit of the hills is very good in its natural state, and peculiarly well-adapted for feeding sheep. There are no trees, and consequently no wood of any sort for fuel, but there is an abundance of peat, which makes an excellent substitute. The absence of trees has, however, this advantage, as its mould relieves the settler from the labours and expense of clearing the land. Water is every where abundant, and remarkably pure and good, rivulets intersecting the land in every direction. There is also plenty of stone, with abundance of clay for making bricks.

The climate of the Falkland Islands is temperate, and considered perfectly healthy, not being subject either to extremes of heat or cold; there is very little frost or snow in winter, the latter seldom lying on the ground more than twenty-four hours together, excepting upon the summit of the hills, while the harbours are never frozen over. No more rain falls there than in the average of temperate climates. The thermometer in winter generally averages 40° of Fahrenheit, and is seldom so low as 32°. In summer it ranges from 60° to 70°, but never rises above 75°.

The prevailing winds are from the S.W. and N.W.; the weather is generally clear with the former, and foggy with the latter. During the winter season the winds at S. and E. blow occasionally with great violence. The summer months are from December to February, and the winter from June to August. Cattle may be said to form the principal production of East Falkland, of which there are supposed to be upwards of 5,000 head, all wild; the beef, although small, is very tender. The cows give excellent milk; the wild cattle are caught by the Guechos or Buenos Ayres Indians with their lassos, who drive them to a place about nine miles from Port Louis, where they are slaughtered when required. There are above 500 horses on the island, also wild, and of a small breed. Rabbits are extremely numerous, and of a very large size; pigs are likewise plentiful in a wild state. There is a great variety of sea fowl, particularly Solan geese, wild ducks, teal, and snipes, most of which are good eating. The creeks and waters abound with fish of various descriptions; the finest is a species of large mullet, which are salted and sold to the shipping. These islands also abound with seals and sea elephants; the skins of the former are very valuable, the procuring of which forms the chief inducement for vessels to resort there. Of natural productions, sea-weed for making kelp is so abundant, that vast quantities could be collected if a market offered for its sale.

Potatoes, turnips, carrots, cabbages, and all common sorts of vegetables, grow exceedingly well, and there is no doubt but currants, gooseberries, and other fruits, would also thrive, while the hardy sorts of Scotch firs and larches might succeed as timber trees.

In a commercial point of view, Berkeley Sound is well situated for forming an establishment to supply vessels with every sort of provisions, as well as for the refitment and repairs, whether outward or homeward bound. An intercourse might also be established with Rio Janeiro, in the Brazils, distant only about twelve or fourteen days' sail, sending thither salt and jerked beef, fish, oil, &c., and bringing back in return, sugar, coffee, rice, rum, and fruits. Corn and flour could be imported regularly from Chili. Some intercourse could no doubt be established with the natives on the neighbouring coast of South America. There is plenty of fine timber to be had at Staten Land, about three days' sail, and spars for masts could be procured in the Straits of Magellan. In short, in a few years these islands might be in a state to barter oils, whalebone, sperm-oil, and seal-skins, left there for sale by the whalers and sealers, in exchange for what the colonists might themselves require from Europe and other parts.

LEAD.—We are informed that in the London and Welsh market the price of lead has lately fallen considerably, and that Derbyshire has caught the infection. Pig lead, which was, a fortnight ago, worth 28*l.*, is now saleable at but 26*l.*, and with a prospect of being a little lower.—*Derbyshire Courier.*

THE MAGGIE AND RED SOIL MINES.—In the Bail Court on Tuesday week, in the case of Holmes & Hodgkin, an application was made for a new trial under the following circumstances.—Some time since disputes arose in the neighbourhood of Bakewell, between certain miners on two estates, called the Maggie and the Red Soil Mines, which continued so high, and was carried to such an extent, that three of the miners were killed in the affray. An inquest was held before the coroner, and the result of the inquiry was, that eighteen were found guilty of wilful murder by the inquest-jury, and that they were accordingly given in charge to the proper officers. During the inquiry, the plaintiff, who is a gentleman in the neighbourhood, provided dinners and ale for the witnesses, and ultimately brought this action against the defendant, the constable, to recover the amount of his bill. The action was tried before the sheriff, and the result was a verdict for the plaintiff. It was now sought to set aside the verdict, on the ground that the defendant, being a mere constable, was not liable; but that the action should have been brought against the headborough. The Court wished for the sheriff's notes, in order to ascertain the ground upon which the jury came to the conclusion, which they had done before deciding upon the application.—*Derbyshire Courier.*

WHEAL VOE.—We are informed that a very rich course of tin is out at the bottom level, at Wheal Voe, which is likely to last for years. The arsenic at that mine, which used to be washed down the leads to Portleven, and was so destructive to cattle and other animals, is now carefully saved, and sold at a good price. Great preparations are making to put Wheal Penrose, Wheal Unity, and Wheal Saturn, lead mines, near Portleven, to work.

PRIMITIVE FORMATIONS.

Chemical science demonstrates that the crust of the earth consists mainly of six substances—silica, or the matter of rock crystal; alumina, or pure clay; iron, lime, magnesia, and potash. Silica, in the crystalline form, is called quartz, and is a large constituent of the primitive mountains, granite, gneiss, and mica-slate.

The micaceous ingredient of these rocks, is composed of 43 of silica, 22 iron oxide, 11 clay, 10 potash, and 9 magnesia. The felsic ingredient of granite and gneiss, consists of 60 silica, 22 clay, and 5 potash.

The third of the primitive stratiform rocks is clay-slate, or rock-slate. It affords, by analysis, 49 silica, 23 clay, 11 iron-oxide, and 5 potash.

If to these four bodies, quartz, mica, felspar, and clay-slate, call simple minerals, because they are of homogeneous aspect, we add hornblende and augite, we shall have before us the principal mineral constituents of the primitive shell of the globe.

Hornblende consists essentially of 42 silica, 30 iron-oxide, 12 clay, and 11 lime; and augite of 54 silica, 22 lime, 12 magnesia, and iron-oxide.

Thus we see that silica, clay, lime, magnesia, iron-oxide, and potash constitute by far the greater portion of the hard materials of the earth as far as it has been explored.

Quartz, felspar, and mica, blended in distinguishable crystalline grains constitute granite.

Quartz, felspar, and mica, in crystalline scales or spangles, constitute gneiss.

The mica-slate formation consists of the mineral of that name, interspersed with masses of quartz.

Clay-slate rock is also the mineral of that name, interspersed occasionally with layers of quartz.

The mountains of sienite, porphyry, hornblende-slate, greenstone, and basalt, are composed chiefly of the minerals hornblende, augite, and felspar, variously mixed in form and proportion.

Such is a general outline of the substances which form the primitive mountain, and table-land edifices of the terrestrial spheroid. Reduced to their utmost state of simplicity, they become, in the hands of an analytical chemist, the combustible elements—silica, aluminum, calcic magnesium, potassium, iron; a mixture of which, at common temperature on coming in contact with water or moist air, would cause fire and explosion; and if the quantities were great, earthquakes and volcanic eruptions would ensue of commensurate magnitude.

That silica, and its associated bases, which are oxidized at the surface of the earth, and thus deprived of their elementary activity, exist at moderate depth beneath that surface, devoid of oxygen, in the state of simple combustibles, there is little reason to doubt. The phenomena of earthquakes and volcanoes lead plainly to this conclusion. The observed in subterranean regions, progressively increasing as we descend, renders it further probable that these combustible elements of there in a fluid state; an effect which would result from a very moderate heat, one greatly inferior to what is requisite for the fusion of oxides.

The primitive envelope of the globe, seems to have originally consisted of concentric strata of gneiss, mica-slate, and clay-slate, with partial layers of semi-crystalline limestone; for such, with a few inconsiderable exceptions, constitute its rocky crust, and are spread over its regions. These coats, however, no longer lie in layers concentric with the spheroid, but are thrown up into nearly vertical planes, interspersed in many points by towering masses of granite and porphyry.

On the primordial spheroid covered with its illimitable ocean, the stratiform coats lay in horizontal planes; but with the gathering together of the waters, on the emergence of the land, they were heaved abruptly into the nearly vertical tables, in which they now universally stand. This remarkable position corresponds to the eruptive violence that caused it. From the shoulders and flanks of the stupendous granite peaks, mantles of gneiss and mica-slate depend in magnificent pery. These schistose coverings are arranged near the summit in almost upright, which lower down, become sloped off with clay-slates, limestone, into a gentle declivity. The coats of gneiss are often distorted into the most singular flexures of rock scenery, demonstrating certain planes of texture at the instant of erection; resulting either from the moisture out of which it rose, or the softening influence of terranean fire.

ICELAND.—In the bulletin of the Geological Society of France, a very interesting report, by M. Eugene Robert, the fellow traveller of Gaimard, concerning the geology of Iceland. It is much too long to insert here, but we extract one or two passages.—"On arriving Reykjavik, where the snow still laid upon the ground, the sides of the chain of mountains were before us, and we thought we saw covered with green turf, which singularly contrasted with the snow feet; on inspection, however, we found that this remarkable colour came from the green wacke, of which these mountains are chiefly composed."

The warm springs of Laugness, near Reykjavik, are equal in temperature to that of boiling water. These springs are intermittent like the Geysers, and also deposit silica in a gelatinous form, which immediately hardens on leaving the spring, and assumes the blue color often seen in agates. The stream of stony lava, at Hapnef, remarkable for the enormous cavities which it has formed in cooling, which the Icelanders convert into stables and sheepfolds. Its surface covered with sharp asperities, is not less curious for its sudden elevation which occasionally rises abruptly, like the sides of a wall.—With regard to the celebrated Geysers, M. Robert says, "We only saw the greatest shoot forth in the wheat-shaf form, which is the highest; but think there has been some mistake in the heights ascribed to it, which, in our opinion, never amount to more than from eighty to hundred feet. In this we are confirmed by the inhabitants themselves. There seems to be a close connexion between the great Geyser and Strokur, for they generally flow at the same periods, although alternate. When to the windward of the Geysers, we smelt a faint odour of sulphur of hydrogen, which becomes much stronger in water that has been in bottles. In an extent of siliceous deposit of four leagues, we were able to observe this substance in all its forms, from the friable to the translucent and compact state; and we saw, not only impressions of birch leaves, equisetaceae, and various grasses, but, more particularly, stems of birch trees, greatly resembling our agatized woods. Not only this species now grows in the island; and, it is supposed, that the great invasion of the silica has destroyed them. The numerous springs of water all occupy extensive valleys in the interior of the island, and bordered by phonolite. We should say, from observing these, that they issue from fissures connected with a volcanic centre, when acquire the high temperature and peculiar properties which distinguish them. Their ascensions are never more beautiful than when heavy have inundated the valleys."

RAILROADS DO NOT DIMINISH THE NUMBER OF HORSES.—It is not generally known that the number of horses employed to work a from London to Manchester is nearly 200, and that, on an average, horses annually consume the produce of 700 acres of land. A copy, after noting this fact, asks, "should railways, at some period, supersede stage-coaches entirely, what is to become of the due?" Now, in the first railway "experiment," on a large scale, then might be called the Liverpool and Manchester Railway, much cry was made as to the loss it would cause, not only to the coach proprietors, but to the agriculturist, as it was calculated there were no more work for fourteen coaches on that line of road, requiring one journey twelve horses, and that consequently the produce of 12 acres of land as these horses had consumed, would have no room. What is the fact? That the horses now required in connexion with railway for drawing omnibuses, waggon, &c., exceed all the coaches between Liverpool and Manchester.

SHOCKING ACCIDENT.—On Thursday week, between ten and o'clock, an accident occurred in the shaft No. 4 of the London and Birmingham Railroad, near to Primrose-hill. The miners were about a huge clump of soil which they had undermined, when they felt peculiar cracking of the earth which preceded a fall; the men ran off the way, and were fortunate enough to escape with but some slight lusions, excepting one of them, named William Fisher, who was under a ponderous load of the falling mass, weighing between three tons. He was dug out as quickly as possible, but was so dreadfully injured that it is nearly impossible that he can survive.

ORIGINAL CORRESPONDENCE.

GEOLOGY—THEORY OF THE CREATION.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—When I forwarded my letter to you on the THEORY OF THE CREATION, and which you did me the favour of inserting in No. 34 of your valuable Journal, I did not contemplate that it would have attracted the attention of so eminent a cosmologist as W. B. of Trinity College, Cambridge.

Whether the opinions expressed in that letter, or in the observations appended to it, be maintainable or not, it would ill become me to enter into a controversy with one so learned, and at the same time so indefatigable in his investigations, both theological and geological.

By your permission I will endeavour to explain my meaning as it respects both the words *interpret* and *ignorant*. In using the former, it cannot for a moment be supposed that I intended it in the more general occupation, viz. translation, because a very little reflection ought to convince every one that I could not be supposed to brand as ignorant any person who had studied the Hebrew or Greek languages. I readily admit that I expressed myself rather imperfectly, and therefore beg now to be allowed to ask, whether it is not probable that the common reader, wholly unacquainted with the sacred writings in the original, might be led to suppose that the six days spoken of in Genesis as the time expended in the labours of the Deity, were simply so many diurnal revolutions of the globe, as well as the seventh day, ordained to be a day of rest.

However this may be, still both myself and your readers in general will feel thankful should any want of precision in wording my communication be the means of eliciting from W. B. so truly acceptable an article as that proposed by him in No. 35 of the Mining Journal. I am, sir, your obedient servant, D.

MIDLAND COUNTIES RAILWAY.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—In reference to a paragraph which has gone the round of the papers, commenting on the appearance of the name of Lord Viscount Melbourne, as a subscriber of 5000*l.* to this Railway, I think it right to state, that Lord Melbourne's subscription took place at the commencement of the undertaking in the year 1833. His Lordship is one of the principal land-owners on the line, and was induced to support it from a belief that it would be beneficial to that part of the country in which his property lies, and with which his interests are identified.

I have further to state, that the Midland Counties Railway has been three years before the public, and that the subscription list was filled earlier than that of any Railway now before Parliament, and before many of them were projected or thought of.—Yours obediently,

J. F. BELL.

Secretary to the Midland Counties Railway.

19, Parliament-street, May 11.

TIN BOUNDERS' CLAIMS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—Having had a Cornish paper forwarded to us containing Mr. Hill's letter of the 3d instant, and which may probably appear in the Mining Journal on Saturday next, we think it right to send you a few more lines, if it were only to say that we did not intend in our letter, or advertisement, any disrespect to the characters either of Mr. Silvester or Mr. Hill.

Mr. Hill's letter, though very temperate, is so weak in argument, that it really scarcely requires an answer. He first talks of Mr. Smith's lease being forfeited, which is laughable; and he himself gives no reason on which he founds such an opinion, except one in which we cannot possibly concur, viz. his own "poor judgment." Secondly, he then states that he grounds the claim of tin bounders on Captain Crease's own title, his own lease, which he says expressly recognises a distinct and independent right to bounds, but he does not say how or in what manner; whereas the fact is, that neither bounds or bounders are in any way mentioned or alluded to in the lease. Thirdly, he acknowledges the duchy being entitled to toll, but says that the bounder is entitled to the farm. Why, the lease is expressly of the toll and farm. But whatever may be considered by Mr. Hill the bounder's farm, it is clearly only the bounder's right to turn the tin to account for himself, dependent wholly on his having continued to work tin bounds and to pay the duchy its full toll. Fourthly, Mr. Hill proceeds to quote Statutory laws, which were passed illegally, are considered decided innovations on the law of the land, and would never stand for a moment in the superior courts; but even these do not make out his position, and he and the unfortunate bounders have found that even backed by all these authorities they are never able to come into court, either against the duchy, lessee, or the adventurers under him. Fifthly, Mr. Hill makes large quotations from the cause of Rowe & Brenton: they are all answered in a word. In that cause no question arose between the duchy or its lessee and the bounder, it was no part of the issue to be tried; and when bounders and bound agents were giving evidence, it was natural that they should represent, as Mr. Silvester has done, that the toll was halved with the duchy lessee. But the cause of Crease & Barrett has completely set that question at rest. Sixthly, Mr. Hill says that the practice of dividing the dues between the duchy and the bounder has prevailed, *ex necessitate rei*. Now, if all the Cornish miners understood Latin, we should be content to have left the argument on that expression, and have felt that Mr. Hill's letter answered itself, and fully answered our purpose. But we fear some of the miners may suppose that *ex necessitate rei* means, "according to the law of the land;" whereas they should understand, that the real meaning of the words is, "so long as Mr. Silvester was duchy toller." Seventhly, Mr. Hill says, towards the close of his letter that "the bounder has clearly the exclusive right to grant sets" (though he does not deign to give us a single word or authority to show how that right is to be established); and he goes on to say, that "any adventurers working under a grant from Captain Crease," will be liable to account to the bounder, "and at any moment be deprived of the result of their labour and expenditure." Now, will not the public imagine that, if this were the fact, Mr. Hill would, in the last five years, have made some adventurer under the duchy lessee account to some of his clients, the bounders? And is not the fact of his not having done so, clear evidence that they can never show themselves in a court of law or equity. We must again challenge Mr. Hill to file a bill for some bounder for an account of tin raised against the adventurers in Wheal Whidden, or Wheal Ruby, or some other mine that he cautions in his Wendron advertisement, or else bring an action of trespass for the tin; and if he does not do so, the public will only laugh at his advertisements.

We are, Sir, yours most obediently,

BARTLETT and BEDDOME.

27, Nicholas-lane, Lombard-street, May 10, 1836.

TO THE EDITOR OF THE WEST BRITON.

SIR,—I will notice as briefly as possible the letter of Captain Crease's solicitors, published in your last week's paper, because I think it right that their assertions should not be allowed to pass uncontradicted.

And first, permit me to state, that although in my poor judgment the lease of the late Mr. Smith has been repeatedly forfeited by its present holder, I do not attempt to deprive Captain Crease of the full benefit of its provisions. The question of forfeiture is one between the duchy and its lessee, in which I have no inclination to interfere. I would rather ground the claim of the tin bounders on the root of Captain Crease's title—his own lease—which I contend expressly recognises a distinct and independent right to bounds.

I have never for an instant denied that the duchy lessee possesses a right to tin toll, i.e. the portion payable to the owner of the soil, or his grantee, where tin bounds exist, in which character the duchy must be considered. I also admit that the bounder is liable to pay such toll; but I, at the same time, contend, that the latter is entitled to his farm, varying in its proportions in different districts from 1-10th to 1-14th of the produce—the average being probably 1-12th.

The rights of the bounder are recognised and confirmed in all the acts of convocation, and provision is made for cases in which tin bounds are not worked.

Captain Crease's solicitors state, "The bounder has no title to any tin work in which he has ceased to labour, and pay toll twelve months; for it appears from Statutory Records now extant, that the freeholder may expel the bounder from his land, if the bounder's work be not lawfully assured by working, and toll tin paid for the space of a whole year."

I know the acuteness of the gentlemen who make this assertion, and I am astonished they should have overlooked the Statutory Law, which completely refutes their position.

It is stated in the Inquisitor Roll of Geo. II. p. 91, that tin bounds lie often unwrought for many years, to the great prejudice of the Statutaries, to remedy which it is enacted, that if tin bounds lie unwrought for twelve months, and any person be desirous of working, he may give notice to the bounder or his agent to work in two months; at the conclusion of which period, if no step be taken, the party giving the notice may work as if he had a set,

"upon paying the usual and accustomed farm" to the bounder. And to establish and protect the bounder's interest more fully, it is also provided, that the party shall enter into a bond in 100*l.*, with two sureties in 50*l.* each, to work effectually; and in default, the bounders may re-enter.

It is true that there is a clause in the last convocation, which the altered condition of society, and the numerous inclosures in the county, rendered expedient—it is this: That if the owners of tin bounds deliver not toll-tin in three years, or at least shall not work effectually, the bounds shall be void; but surely Captain Crease's solicitors have not considered this clause as applicable to bounds generally!

It is *prospective* in its operation, being confined in its application to such bounds "as shall thereafter be set."

In the great case of Rowe and Brenton, the duchy relied on the perception of tin tolls as evidence of their title as lords of the soil. The Attorney-General detailed at considerable length the law and custom of bounding, and if your readers will take the trouble to refer to Mr. Concanen's report of that case, they will find the principle for which Mr. Silvester and myself contend admitted by all parties. Sir Charles Wetherell said, "This right or custom of bounding is equally prevalent against the Duke of Cornwall as it would be against a private individual owner in fee;" and the original Statutory Roll was produced in evidence, "from which the laws as to bounding were read."

Indeed, the courts have repeatedly sanctioned and confirmed a distinct interest in tin bounds—the toll and farm are separately rated in the parish books, and it were endless to enumerate the instances in which the bounding system has been interwoven with the concerns and economy of the mining district, and as such, been sanctioned by courts of justice.

I regret that the highly respectable gentlemen who represent Captain Crease should have, for a moment, descended to personality in alluding to Mr. Silvester. It happens that his character and independent line of conduct are pretty generally known, and Captain Crease must be aware that any employment has long ceased to be to him a matter of importance. Why, then, apply to Mr. Silvester the offensive epithet—"discharged servant"?

It was natural that the effect produced on the public mind by Mr. Silvester's letter and caution should have seriously alarmed the learned gentlemen—I fully anticipated such a result; and I think that the measures which the bounders have determined to adopt towards Captain Crease, and those claiming under him, are likely to increase that feeling, as they must effectually check the infringement of private rights, and reduce the powers of the duchy lessee to those created by his lease, and agreed by Messrs. Parke and Freeth, the duchy solicitors, in their late advertisement.

But you must not suppose, sir, that the facts spoken to by Mr. Silvester, as derivable from long experience, are confined to this neighbourhood, and were, as is broadly insinuated, the result of some local connexion Mr. Silvester had formed, inimical to duchy interests. The practice of dividing the dues between the duchy and the bounder has prevailed, *ex necessitate rei*, for a considerable period. Adventurers in early ages of mining were able, and did often pay, one-fifth dues, and they were then clearly in a situation to pay the bounder and lord their respective portions in full; but I need hardly remark that no adventurer could now do so; and hence originated a mutual concession in favour of the adventurer, without which no ground in Cornwall could be worked.

This is the practice which my friend Mr. Silvester found in full operation, and which he continued until the present lessee was advised to disturb it, and being dissatisfied with his own proportion of the good things, he,

"Like Moses' serpent, swallowed up the rest."

Then, it seems, Mr. Silvester was deprived of the lessee's confidence and employ, and he is surely entitled to great credit for refusing to co-operate in an attempt to disturb so equitable and necessary an arrangement.

The duchy do not view the division so much complained of by Captain Crease as injurious to their permanent interests, and I would here again crave leave to refer to Mr. Concanen's report:—"Certain tin bills, dated 1796, showing the sale of the produce of the Porth Stream-work, in Mr. Carthew's land, were shown to Mr. Colenso: from which, and the receipts connected with the same, as proved by him, it appeared that John Packington had received for the lessee, Mr. Donnitmore, one moiety of all toll-tin, in respect of that stream-work, and that the other moiety of the same toll was paid to Mr. Carthew's family as bounder. This, Mr. Colenso stated to be the customary mode of division between the lord of the soil and the bounder in the neighbourhood of these streams."

The question stands thus:—Captain Crease claims his full toll—the bounder has clearly the exclusive right to grant sets, and adventurers working under a grant from the former will be liable to account to the bounder, and at any moment be deprived of the result of their labour and expenditure. If any person, after the repeated cautions which have been given on behalf of the bounder, will embark capital in duchy land, he must be infected with little short of judicial blindness.

I can only say, in conclusion, that so far from the bounders (in this neighbourhood at least) being in "expiring struggles," as stated by Captain Crease's solicitors, they have come to a resolution to protect their property, and will avail themselves without hesitation of any discoveries made by those working without their authority. Let adventurers in the county and elsewhere take heed, and not only adventurers but smelters, for all purchases by them are open to litigation on the part of the bona fide owner.

I am, sir, your faithful servant,

FREDERICK HILL.

Helston, 3d May, 1836.
* I have in my possession a sett of Owen Vean in Penrynshire, where the dues were at one time 1-6th—it has recently been set at 1-20th.
† Then and now the very intelligent duchy agent at St. Austell.

PARLIAMENTARY SUMMARY.

HOUSE OF LORDS.

MONDAY, MAY 9.—The Teignmouth Harbour, Forfar Railway, and other Bills, were brought up from the Commons.—The order of the day having been read, their lordships went into Committee on the Municipal Corporations (Ireland) Bill. Lord LYNCHBURGH rose for the purpose of moving some verbal amendments to some of the clauses, which were opposed by Ministers. A lengthened discussion took place, and on two occasions the House divided, when the amendments were carried by a considerable majority.

TUESDAY.—The Irish Constabulary Bill was read a third time.—In a Committee on the Church Pledgability Bill, upon the reading of the fourth clause, which provided that a clergyman could not hold two benefices, the united value of which exceeded 1,000*l.*, or that the highest amount of each of two benefices to be held by a clergyman should be 500*l.* each, Lord WYNDHAM moved the amendment, extending the amount of each benefice to 1,000*l.* per annum; thus enabling the clergyman to have 2,000*l.* per annum from two benefices.—A division took place, when there appeared for the original clause 29; for the amendment 7.—Majority 22.

FRIDAY.—The Birmingham, Bristol, Thames Junction, and Hayle Railway Bills were read a first time.

HOUSE OF COMMONS.

MONDAY, MAY 9.—The Lords amendments to the Arbroath and Forfar Railway Bill were agreed to; and the Dundee Harbour Bill was read a third time.—Upon the second reading of the Factories Act Amendment Bill, a long and animated discussion took place. Mr. P. Thomson, Mr. Baines, Sir Robert Peel, and others, supported the Bill. Lord Ashley, Mr. Poulter, Dr. Lushington, Mr. Goulburn, Mr. Wakley, and others, opposed it. On a division, there appeared for the second reading 174; against it 176.—Majority 2.

TUESDAY.—Mr. GIBBONS brought up the report of the Midland Counties Railway Committee.—A Bill to regulate the Dublin Steam Packet Company was, after much discussion, read a first time.—The House went into a Committee on the Tithe Bill, when Mr. RICHARDS called the attention of the House to the case of lessees of iron mines, who now paid no tithe for any land rendered tithe-unproductive during the course of their proceedings, but would, according to the bill, have to pay a rent-charge for all land that would, within a certain number of years last past, produce titheable produce. The principle of the Bill was to leave the tithe-payer and the tithe-owner in the same condition as they now were, and for this reason he begged to move at the end of the clause a proviso, that in case any part of the land should at any time be broken up, or the surface destroyed and rendered unproductive by the raising of coals, iron, or other minerals, and erecting the necessary buildings, the rent-charge to be imposed should be abated in a proportionate extent.—Lord J. RUSSELL said the clause would be of no importance in any part of the country but Staffordshire, and he thought it was not worth while to depart from the principle of the Bill. The House then divided, when there appeared for the amendment 54; for the original clause 171.

WEDNESDAY.—Mr. BROTHURTON presented a petition from Salford in favour of the Manchester and Salford Junction Canal Bill.—Colonel PASSEY on the presentation of the report on the Festiniog Railway Bill, moved that the said Bill be re-committed, the Committee having reported that part of the preamble was not proved.—The Earl of DARLINGTON, as chairman of the Committee, opposed the motion. The Committee had sat five days, and had carefully investigated the subject referred to them; and he considered that they had come to a correct decision.—After some conversation the motion was withdrawn, and the report was agreed to.—On the motion of Mr. MILLS, the Lords amendments to the Great Western Railway Act Amendment Bill were agreed to.—Mr. BARNESMAN presented the report of the Committee on the Aberdeen Public Schools Bill.—On the motion of Sir M. W. HINDLEY, the Bradford Junction Railway Bill was read a third time and passed.—Mr. BARNARD presented a petition from the borough of Greenwich, praying that in any Railway Bill for Kent, the House would be pleased to make

regulations for the railway to pass through Greenwich. (Much laughter.)—On the motion of Mr. TWISS, the Birmingham, Bristol, and Thames Junction Railway Bill was read a third time and passed.

THURSDAY.—Mr. LAMBERTON presented petitions from Durham and from the owners of collieries in Durham and Northumberland, against the South Durham and South-West Durham Railway Bills.—On the motion of Mr. FENNER, the Hayle Railway Bill was read a third time and passed. Mr. CLAY moved for a select committee to be appointed "to inquire into the operation of the act of the 7th Geo. IV. c. 46, permitting the establishment of joint-stock banks, and whether it be expedient to make any and what alterations in the provisions of that act." The hon. gentleman said that under that act a system of joint-stock banking had grown up already of great magnitude which is likely extending its ramifications, and which promises very shortly to comprehend every portion of the kingdom, and every class of the population within the sphere of its operation. Of the importance of the consequences, whether good or evil, which must eventually flow from the workings of this system, no man can reasonably doubt. He stated that it was his object to induce the House to inquire whether the system of joint-stock banking in this country had received the best legal development of which it was susceptible. It was capable of conferring great benefit upon the community, but might, if ill regulated, give birth to as great calamities. He reminded the House of the year 1825, the mad excitement, the idle dreams of unbounded prosperity, the wild projects at the commencement of that memorable year, the wide-spread distress, the still more widely-spread alarm which attended its close were not forgotten by that House, and would not, he trusted, be forgotten by the public. In the panic a very great number of country bankers stopped payment, fifty-nine commissions of bankruptcy were issued against country banks from October 1825 to February 1826, and many suspended their payments whose affairs did not proceed to bankruptcy. By a return to an order of the House of the 21st of March last, it appeared that there was at that date sixty-one joint-stock banks established with their branches at 473 places, and consisting in all of 15,673 partners or shareholders; of these three were established in 1826, four in 1827, six in 1829, one in 1830, eight in 1831, seven in 1832, ten in 1833, ten in 1834, six in 1835, and four in this year to the 21st, and since the date of the return five had been entered at the Stamp Office, one of them having twenty-four branches and 2,032 partners. The hon. member said that he could not but think that the circumstances he had stated to the House, the vast and growing extent of the joint-stock banking on the one hand, the absence of all legal control over the working of that system on the other, constituted a state of affairs very far from satisfactory, and not to be contemplated without alarm, or at least without considerable anxiety. An element of tremendous power had been introduced into our monetary system, and no precaution had been taken to limit or control its operation. "By permitting," said the hon. member, "an unlimited number of persons to combine for the purpose of carrying on the trade of banking, you confer on them an enormous power of creating an extensive business, by rendering all the shareholders individually responsible, you afford the most dangerous facility in obtaining credit, whilst you take not the smallest precaution that such banks shall possess capital commensurate with the engagements into which the powers and facilities you bestow will tempt them to enter. I can conceive no state more dangerous for any commercial community than one in which a system composed of such elements should be in full activity, in which the country should be covered with joint-stock banking companies, enabled to extend their operations through the thousand channels open to them by means of their shareholders, and feeling no necessity to limit the accommodation they afford from want of funds the place of which, for a certain length of time at least, their credit will supply. I can conceive no state more directly tending to produce that excitement, that overtrading, that apparent prosperity, so pleasant in its advent—so bitter in its consequences. If there be one case in which legislative interference with the intercourse of individuals could be justified equally by reasoning and experience, beyond all doubt it would be an interference to obviate the dangers which an abuse of the powers and facilities of joint-stock banking inevitably tends to produce." The hon. member considered that the real injury to the community produced by the working of an unsound system of banking to be, first, in the waste of capital consequent on the overtrading which it creates or stimulates; and secondly, in the shock to credit, the alarm, the distrust and lessened demand for labour which the extensive failure of banking establishments inevitably produces. Among the prominent evils attendant upon joint-stock banks, he considered to be the facility afforded by the existing law for getting up, in a moment of excitement, bubble companies. Companies, he meant, of which the projectors had no other object than to make a profit by jobbing in the shares. After going into further very minute details, the hon. member stated that the remedy he would propose for the defects in our present system consisted in the adoption of three great principles—limited liability—paid up capital—and perfect publicity. Mr. RICE said that he would not object to go into a committee, but he must be allowed to say, with reference to the dangers he (Mr. Clay) had alluded to, as attendant upon the establishment of joint-stock banks, that if a physician were to lay down the principle that under a healthy state of body it was continually to be feared that there lurked the seeds of organic disease, no one could rise from his bed with pleasure in the morning, or retire to it with safety at night.—Mr. O'CONNELL said that the hon. member for the Tower Hamlets was very cautious in speaking of the joint-stock banks of England only, but why did he not refer to the banks of Scotland? There were numerous failures in the one country where our system of banking was established, but in the other, where another system prevailed, there were none, or at least if there was, there was no ultimate loss. The reason why private banks incurred so much danger in time of panic was, that they were merely banks of deposit, where persons made their hoards, which of course they drew out in times of alarm, but nine-tenths of those who deposited their money in joint-stock banks knew that they would injure themselves personally by withdrawing their deposits, and therefore they let them remain.—Mr. RICHARDS said that not a single failure had taken place among the joint-stock banks during the ten years they had been in existence.—Mr. HANDLEY said that it had been admitted during the panic of 1825, that joint-stock banks would be the panacea; and he begged to ask the House and the country, whether there had occurred from the system any thing like injury, or that there was any thing in their proceedings that at all called for inquiry? After some further discussion, Mr. Clay, in reply, said, that so far from being hostile to joint-stock banks, he was their decided friend, for he thought they were calculated to be of great benefit to the country. The appointment of the Committee was then agreed to.

FRIDAY.—The Constabulary (Ireland) Bill, with amendments, was brought from the Lords.—The Dublin Police Bill was read a third time and passed.—The House went into committee on the English Tithe Bill.

STEAM ENGINES.

AVERAGE QUANTITY OF WATER PER MINUTE DRAWN FROM THE MINES IN CORNWALL IN APRIL.

Mine	Long Measure	Short Measure	Imperial Measure
Wheal Unity Wood	495.38	Rochester Mill	223.85
Poldice	695.34	Wheal Lannar	474.26
Wheal Darnall	68.0	Great St. George	914.69
Wheal Jewell	95.18	Wheal Penrice	149.24
Cadgwith	854.72	Rollerton	187.57
Delamouth	228.39	Wheal Darlington	1108.08
East Wheal Crofty	217.7	Ballaunwidder	18.74
Wheal Tolgus	914.16	Levanant	18.74
Binner Downs	128.76	Ding dong	33.49
Wheal Julia	891.39	North Roskear	174.7
Marazion Mines	477.39	South Roskear	133.67
St. Ives Combe	249.39	Wheal Virgin	266.65
Wheal Heath	1616.41	South Wheal Tremen	239.63
Concise	1616.41	Charles Town	212.11
United Mines	342.12	United Mines	212.11
Wheal Bessuchamp	342.12	Providence Mine	122.52
Pelgouth	1212.81	St. Ives	122.52
Pennrhos	724.98	East Wheal Rose	118.24
East Crinnis	991.38	Wheal Liberty	561.53
Powey Cms. Austen's	364.98	Wheal Lannar	186.1
Lauasert, Rawle's eng.	97.2		

NATURAL PHENOMENON.—One day in the beginning of last week, some of the workmen employed in the erection of the new buildings, on Weenslandhaugh, in the course of their operations, came upon a live trout enclosed in the solid rock. It was of the par kind, and measured about seven inches long. The writer of this paragraph saw it in less than an hour after it was discovered, in the possession of Walter Wilson, Esq. The species was undoubtedly broken a little above the greater dorsal, in the process of exupiation, and it lived only a few seconds afterwards. It had much the appearance of trout of the same species, to which the writer thinks it belonged. If there was any peculiarity, it seemed to him to be in its great transparency.—*Correspondent of Kola Chronicle.*

COAL AND GOLD.—In a work published a year or two ago by a Spaniard, there is a comparison between the produce of gold and silver mines in America and the coal mines in England; from which it appears that the gross value of the annual produce of the coal mines, which is 18,000,000 of tons, amounts to 440,000,000 francs, including the wages and other charges, whilst the produce of gold and silver mines, including the same charges, is only 220,000,000 francs; showing a balance in favour of the coal of England over the gold and silver mines of the New World, of no less a sum than 220,000,000 francs. A franc is equal to 10*l.* sterling.

CORNWALL.—A valuable SHARE IN THE CONSOLIDATED AND UNITED MINES, near Redruth.—By Mr. HOGGART, the Mart, on Friday, May 27, at Twelve, by direction of the Executors of Miss Anne Thompson, of Dedham, deceased.

AN ADVENTURER'S SHARE in that highly prosperous concern, known as the Consolidated and United Mines, in the parish of Gwennep, near Redruth, which has realised during the last seven years, and is now yielding, an average annual profit of upwards of £250 per share. In the county of Cornwall this concern is too well known, and too highly appreciated, to require any comment or recommendation; but it is presumed that this is the first share which has been brought to public competition, and as possibly a long time may elapse before another opportunity may occur of purchasing a share, the attention of the public is particularly directed to this circumstance. In comparison with the magnitude of this celebrated concern, the number of original shares is few, being only 100, and those now in the hands of a small number of fortunate adventurers, and very rarely to be obtained.

Particulars at the Mart, and of Mr. HOGGART, 62, Old Broad-street, Royal Exchange.

BOLIVAR MINING ASSOCIATION.—NOTICE IS HEREBY GIVEN, that an EXTRAORDINARY GENERAL MEETING of the Proprietors of the Bolivar Mining Association will be held at the Office of the Association, at No. 9, Austin-frars, in the city of London, on Wednesday, the 18th day of May instant, at one o'clock in the afternoon precisely, for the purpose of ELECTING TWO MANAGING TRUSTEES of the said Association, in the place of the two Managing Trustees going out according to the amended provisions of the deed of settlement. And notice is hereby also given, that immediately after such meeting an Extraordinary Meeting of the Proprietors will be held at the same place, for the purpose of considering an application which has been made to the Managing Trustees on behalf of certain parties lately holding auxiliary shares in the Association, and of determining whether any and what measures shall be taken by the Managing Trustees in consequence of such application, and for the relief of the parties in question; and to give all necessary powers and authorities to the Managing Trustees in this behalf.

ALEXANDER ALLEN,
Secretary.

PUBLIC COMPANIES.

COMPANY.	MEETINGS.	CALLS.	DIVIDENDS.
		Amount. Payable.	Amount. Payable.
Bolivar	18th May		
New Granada	18th		
Rock Life Assurance Comp.	18th		
Provincial Bank of Ireland	19th		
East Cornwall Silver	23th		
Cuba Copper	26th		
North Cornwall	June		
United Hills	1st		
Colombian	16th		
Anglo-Mexican	6th July		
United Mexican	27th		
Perran Consols		11. 15th May	
Albion Copper		5s. 15th	
Bolivar		2s. 15th July	
Alton		11. 18th May	
Kerrow		11. 20th	
Hayle Railway		5s. 20th July	
East Cornwall Silver		10s. 22d June	
Fulbreton		11. 4th	
Union Gold		42s. July	
Anglo-Mexican Mint		6s. 1st June	1st Dec.

* * We purpose in future giving the place and hour of meeting.

MEETINGS OF SCIENTIFIC BODIES

IN THE ENSUING WEEK.

SOCIETY.	PLACE OF MEETING.	DAY.	HOUR.
Royal Geographical	21, Regent-street	Monday	9 P.M.
Civil Engineers	1, Cannon-row	Tuesday	8 P.M.
Society of Arts	Adelphi	Wednesday	7 P.M.
Antiquaries	Somerset House	Thursday	8 P.M.
Royal	Ditto	Thursday	8 P.M.
Royal Institution	Albemarle-street	Friday	8 P.M.

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NOTICES TO CORRESPONDENTS.

A. B. will find a letter at the post-office, Newcastle-on-Tyne. His letter on the coal trade will appear next week.

ALTERATION IN MODE OF PUBLICATION.—We have received several favours on this subject. The suggestions of our friends shall receive due consideration.

ALTON MINES.—From despatches received from the works of the 23d March, it appears that every thing was progressing favourably; that Ralpin had assumed a more permanent character; that the health of the establishment had considerably improved; and that the manager was anxiously awaiting the arrival of vessels, in order to commence the shipment of ores.

SALE OF ORES AT REDRUTH.—We are obliged to defer until next week the table of the sale of ores; the amount, standard and produce, will be found under "Latest Intelligence."

A SUBSCRIBER, who writes us on the subject of the Holmbush and other Companies is very much mistaken. He surely did not expect us to insert his letter.

SALES OF BLACK TIN.—We are much indebted to our kind correspondent, A. B., for his favours, and hope for a continuance.

VICTORIA RAILWAY.—All communications must be treated as advertisements, and as such we shall be happy to insert our Correspondent's letter.

THE MINING JOURNAL, And Commercial Gazette.

LONDON, MAY 14, 1836.

The success which has attended the formation of Joint-stock Banks, and the extent to which speculation has been of late carried, fostered as the schemes have been, more especially, by the capitalists of Liverpool and Manchester, have had the effect of creating companies innumerable, with deposits varying from one shilling to one hundred pounds per share.

Our present number affords a frightful evidence of the Joint-stock mania which exists in the populous towns of Liverpool and Manchester; and as projected schemes for the construction of Railroads are on the wane, it appears that Joint-stock Banks are to take their place, and it therefore behoves us to caution our readers from hastily lending themselves to these projects. Their usefulness is undoubted, and their national importance acknowledged; but there is a strong line to be drawn between those Companies formed with the legitimate object of employing capital, and those formed merely to afford an opportunity for gambling.

Our more immediate object on the present occasion is, to direct the attention of our readers to *Mining pursuits*, which appear, while the Railway mania existed, to have been too much lost sight of. The cheering accounts, however, received this week by the Directors of the Imperial Brazilian Mining Association, will naturally attract notice, and, we doubt not, have the effect of giving an impetus to mining operations, both at home and abroad.

We have not space to dilate on the advantages arising from the working of mines generally, or on the prospects held out to the adventurer, where integrity and perfect confidence form the basis on which the Company is formed, while it is hardly necessary to remark on the vast fortunes realized of late years from the proce-

cution of working mines in Cornwall. Three mines alone, those of the "Consolidated Mines," "Tresavean," and "Carn Brea," are now yielding to the adventurers upwards of 100,000l. per annum profit; the outlay on the resumption of operations on the two latter of which was not one-fifth the amount of their present annual profits. The mines of Veta Grande, in Mexico—of Gongo Soco, in Brazil, and of Allihies, in Ireland, afford additional evidence that mineral riches are confined to no one clime, nor to any one particular district. Let then the capitalist direct his attention to a subject which, as we have already observed, is at this moment too much neglected.

In conclusion, we have to express our sincere hope, that while encouragement is given to the working of mines, and the employment of capital in our own country, in developing its mineral resources, the capitalist will not be discouraged by divisions; such as we have of late witnessed with pain, as relates to several of the companies which have been formed within the past two years for working mines in Cornwall.

We do not feel called upon to enter into particulars—we believe there are faults on both sides; but we would say to those gentlemen who at public meetings indulge in vituperative language, that they should consider, while they are gratifying their personal feelings, or pique, they are at the same time injuring the property of those, whose interests they, in assuming the office of Directorship of the several undertakings, are bound to protect and support.

We are not at all surprised to find that our remarks of last week, on the advocacy of the "West Cork Mining Company" by a contemporary, should have given rise to expressions so coarse as those employed by way of rejoinder. We must candidly confess, that if language the most gross, and allusions the most indelicate and disgusting, be, in the opinion of the *talented* editor, a refutation, he has fully effected his object. If he expects, however, to bring his paper into notice through the medium of our columns, he is much mistaken. Already have we condescended to notice him, and shall merely observe, that the cause has an able advocate, who has given us indubitable evidence that he is well worthy of the office he has undertaken, and for which we presume he is well paid.

THE FUNDS.

CITY, FRIDAY EVENING.

Consols have been firmer throughout the week, having touched 92½, the last price however was 92¼ for money and account. Three-and-a-half per Cent. Reduced Annuities are 98½, and the New Three-and-a-half per Cent 100½. Bank Stock is 212, and India 259½. India Bonds have been as low as par, but are now at 2 p.m.

Business in the Foreign Market has been to-day rather slack, Spanish Bonds have declined; they closed at 45½. Passive at 14, and Deferred at 22½. Portuguese New Bonds are 86½; and the Three per Cent. 54½. Colombian Bonds are 32½; and Peruvian, 22½. Danish are 76½; Russian are 110; and Dutch Five 102½.

The share market calls but for little observation. The shares of the Imperial Brazilian Mining Co. have, however, had a considerable advance, from the favourable reports received; and mining shares, generally, are looking brighter.

LATEST INTELLIGENCE.

LONDON, MAY 13.—The only alterations in the metal market are, further sales of STRAITS TIN at 110s.; and the remaining stock, of about 30 tons, is held for 115s.—TIN PLATES are on the upward move.—LEAD is again in demand, and considerable purchases have been made in the last three days.—SPELTER also has again advanced, and at the quotation the market is again quiet, but firm. Indeed, sellers demand 5s. higher, but buyers have not appeared beyond 19s. 10d., although the accounts to-day from Hamburg are somewhat higher.

BIRMINGHAM METAL MARKET.—COPPER. The 100l. cake 102½; best selected 104½ per ton.—SPELTER. This metal is quoted at from 24l. to 25l. per ton; 19s. 15s. cash has, we hear, been offered in bond.—ZINC. Common block 115½; bars 117½; refined, 118½; grain 124½.—LEAD. Lead has somewhat given way in price.

LIVERPOOL COTTON MARKET, WEDNESDAY.—There has been a little more inquiry for cotton to-day, but no improvement in prices. The sales are estimated at 2,000 bales, nearly all American, chiefly from 9½d. to 11d.

REDRUTH, MAY 12.—The average standard of this day is 123l. 5s. The average produce 84. The average price 7l. 17s. 6d. The quantity of ore raised 3,892 tons. The quantity of fine copper 334 tons 8 cwt.—Total amount of sale 30,551l. 7s. 6d.

DREADFUL ACCIDENT.—On the 27th of April, at Wheal Julia copper mine, near Hayle, as the miners were preparing to drop a lift of iron pumps of seven or eight tons, which were suspended by a tackle for lowering into the engine-shaft, the fall being attached to a capstan, the parcel of which giving way, and there being fifteen men at the time within the range of the capstan bars, which were revolving with fearful velocity, the men were instantly struck down, three of whom were killed, four or five dangerously wounded, and the whole of them more or less injured.

EXTRAORDINARY DEPUTATIONS ON RAILWAY BILLS.—The deputation in London to superintend the proceedings of a certain railway bill now in progress through Parliament, not content with a splendid suite of apartments taken for three months in Parliament-street, daily banquet at the Piazza Hotel, Covent Garden, at a guinea and a half per head, and have taken a box at the Opera for the season! There nightly may be seen, amidst the aristocratic circle of the "Subscribers to the Opera," the Devonshires, the Jerseys, the Fitzclarences, and the Howards, the shopkeeping physiognomies of a busy trading town in the west of England. The expenses of their wives and daughters, who accompany them, their bill at Howell and James's, Madame Capon's, &c. must, of course, be charged to that convenient item, "Parliamentary expenses in London." The deputations from this town on the "Birmingham and Gloucester," "Birmingham and London," and "Birmingham and Derby Railway" Bills were, we understand, quite laughed at by the other deputations "up" for their economical mode of living. They have all, however, returned with Acts of Parliament in their trunks, whilst none of the others have any thing as yet but bills.—*Birmingham Advertiser*.

COAL MONOPOLY.—A meeting of the inhabitants of the parishes of St. Andrew, Holborn, and St. George the Martyr, was held on Thursday afternoon, at the workhouse, in Gray's Inn-lane, the object of which was to agree to petitions to both Houses of Parliament in favour of the South Durham and South-west Durham Railway, the establishment of which, it was alleged, would lead to a supply of the metropolis with coal at a very reduced rate. The chair was taken by Mr. Ramsden, who addressed some brief observations to the meeting in reference to the importance of procuring this article of fuel at as cheap a rate as possible, which, he said, could only be done by destroying monopoly. Mr. Ramsden remarked upon the importance of the proposed railways, as a medium of communication with the new harbour of Hartlepool, and upon the mineral riches of that district of the county of Durham. Several gentlemen then read the proceedings of the coal-owners of the north, who, it was alleged, had prevented coal from being sold at a cheap rate, and various statements were entered into with the view of showing the oppressive regulations adopted by the coal owners in order to enhance the price of coal in the London market. Instances were also adduced, amongst other places that of Leicester, in order to show that the reduction of the price of coal, increased manufactures, and gave a spur to industry. Resolutions were then passed deprecating monopolies of all kinds, and recommending the two railways in question as the means of procuring cheap and superior coal, and doing away with the monopoly of the great coal owners of the north. Petitions to parliament in favour of these two railways, founded upon the resolutions, were then agreed to; and, after a vote of thanks to the chairman, the meeting separated. A public meeting, we understand, is to be held at the British coffee-house, on Monday next, at twelve o'clock, to take into consideration the same subject.

PROCEEDINGS OF PARLIAMENT RELATIVE TO JOINT-STOCK COMPANIES.

TUESDAY, MAY 10.

Deptford Railway Bill.—A petition of the parishioners and inhabitants of St. Nicholas, against the Bill, was referred to the Committee, and counsel ordered.

London and Croydon Railway Bill.—A petition of the company of proprietors of the Croydon canal against this Bill, was referred to the Committee, and counsel ordered.

London and Dover Railway Bill.—A petition from the inhabitants of Croydon, in favour of this Bill, was ordered to lie on the table.

Durham (South-West) Railway, and South Durham Railway Bill.—A petition of inhabitants of the Borough of Marylebone in favour of this Bill was ordered to lie on the table.

London and Norwich Railway Bill.—A petition of the Corporations of Norwich in favour of this Bill; was ordered to lie on the table.

London and Croydon Railway Bill.—A petition of the company of proprietors of the Croydon canal, for provision for compelling the railway company to bear and to pay the expense of deducting, evidencing, and verifying the title to the hereditaments purchased by them, was referred to the committee, and counsel ordered.

Birmingham and Bristol, Thames Junction, and Brandling Railway Bills.—The reports on these Bills were further considered; several amendments were made, and agreed to.

Hayle Railway Bill, and Dundee and Newtyle Railway Bill.—The further consideration of the reports were deferred till to-morrow.

WEDNESDAY.

Merthyr Tydfil and Cardiff Railway Bill.—A petition from the owners and occupiers of lands and mines in the Taff Valley, against this Bill, was referred to the Committee.

Manchester and Salford Canal Bill.—A petition of surveyors of highways in Salford was presented in favour of the Bill, and ordered to lie on the table.

Festiniog Railway Bill.—A motion was made, and a question proposed,—"That the Bill be recommitted to the former Committee." The motion was, by leave, withdrawn; and the report ordered to lie on the table.

South Durham Railway Bill.—A petition of merchants, shipowners, and manufacturers, in Sunderland, against the Bill; referred to the Committee, and counsel ordered.

Great Western Railway Bill.—The Lords' amendments were agreed to.

Brandling Junction Railway Bill.—The report was further considered; the clause (to use coke in the locomotive engines) brought up, and read a first and second time; considered in Committee, and reported, with an amendment; read a third time, and added; amendments were made; Bill read a third time and passed.

London and Dover Railway Bill.—A petition from the inhabitants of Greenwich, against the Bill, was referred to the Committee.

Birmingham, Bristol, and Thames Junction Railway Bill.—Was read a third time; amendments were made, and the Bill was passed.

London and Norwich (Eastern Counties) Railway Bill.—A petition of Lieutenant-Colonel Archibald Money, against the Bill; referred to the Committee, and counsel ordered.

Midland Counties Railway Bill.—The order (6th of May) for referring the petition of owners and occupiers of land, situate between Blisworth and Leicester, to the Committee on the Bill, was read and discharged.

Hayle Railway Bill.—The report further considered (Prints having been delivered on Friday, May 6); the amendments were agreed to, and the Bill ordered to be ingrossed.

Dundee and Newtyle Railway Bill.—The report further considered (Prints having been delivered on Monday, May 2); the amendments were agreed to; and the Bill ordered to be ingrossed.

THURSDAY.

South Durham Railway, and Durham (South West) Railway Bills.—A petition from the proprietors and lessees of coal mines and collieries in Northumberland and Durham, for inserting a clause relative to the consent of owners of land being taken in writing; referred to the Select Committee on Railway Bills.

South Durham Railway Bill.—A petition of the Dean and Chapter of Durham, against the Bill; referred to the Committee; and counsel ordered.

London and Cambridge Railway Bill.—A petition from the inhabitants and owners and occupiers of land in Harlow and Sawbridgeworth, in favour of the Bill; to lie on the table.

Hayle Railway Bill.—Read a third time; clause added; Bill passed.

Wakefield and Sheffield Road Bill.—Read third time, and passed.

Dublin Steam Packet Company Bill (No. 2).—"To authorize the City of Dublin Steam Packet Company to apply a portion of certain monies, already subscribed, in fulfilment of their contracts for building six additional steam vessels, and to legalize such subscription." Presented, and read a first time, and ordered to be read a second time.

Dublin and Drogheda Railway Bill.—Petitions against the Bill.—Sir Robert Shaw, baronet, the Baron de Rubeck, and others; and landed proprietors, occupiers of the soil, traders, and others, of Kilsallaghan; to lie on the table.

Glasgow and Falkirk Railway Bill.—Petitions against the Bill;—General Sir Joseph Straton; owners of land in Stirling, Dumbarton, and Lanark (two petitions); and Monkland and Kirkintilloch Railway Company; referred to the committee on the Bill, and counsel ordered.

London and Brighton Railway Bill.—A petition from the inhabitants of Brighton, for inquiry into the merits of all the projected plans; ordered to lie on the table.

Coal Mines, &c.—A petition from the owners or occupiers of mines of coal, iron-stone, and other minerals, or their agents, for a law for the more effectual punishment of persons convicted of petty thefts and depredations on their property; ordered to lie on the table.

Joint-stock Banks.—Select committee appointed "to inquire into the operation of the Act of the 7th Geo. IV. c. 46, permitting the establishment of joint-stock banks, under certain restrictions; and whether it be expedient to make any alteration in the provisions of that Act."

FRIDAY.

Manchester and Salford Railway Bill.—Petitions in favour of the Bill; owners and occupiers of lands, mills, manufactories, and buildings, in Bury and Bolton; ordered to lie on the table.

Glasgow and Falkirk Railway Bill.—A petition from proprietors, merchants, and others, inhabitants of Falkirk, in favour of the Bill; ordered to lie on the table.

Preston and Longridge Railway Bill.—Petitions against the Bill from physicians, surgeons, and apothecaries residing and practising at Preston; overseers of the poor, and members of the select vestry of Preston, referred to the Committee on the Bill; Robert Wilfred Skeffington Luttrell, esq.; Robert William Hopkins; and William Miller; referred to the Committee, and counsel ordered.

Birmingham Coal Company Bill.—Reported; and ordered to be ingrossed.

Carlisle Docks Bill.—Report further considered (Prints having been delivered on Monday, 9th of May); Bill re-committed to Mr. Philip Howard and the former Committee; leave to Committee to sit and proceed, and to report upon Monday next.

Liverpool Docks Bill.—A petition from the corporation of Liverpool, against the Bill; referred to the Committee, and counsel ordered.

Liverpool Fire and Life Insurance Company.—A petition for leave to present a petition for a Bill; referred to Lord Vis. Sandon and the Lancaster List.

Salmon Fisheries (Scotland Bill).—Petitions against the Bill; proprietors, operatives, and others employed at the works of Messrs. Leys, Marston, and others works on the river Don; owners, occupiers, managers, workers, and others, employed in the works of Milne, Crauden, and Company, on the river Don; and magistrates and councillors of Aberdeen; referred to the select committee on Salmon Fisheries (Scotland).

Ulster Canal Bill.—A petition from Christina Powell Leslie, against the Bill; referred to the Committee, and counsel ordered.

Dublin and Drogheda Railway Bill.—Petitions against the Bill from the merchants, traders, and inhabitants of St. James, Dublin; St. Michael, Dublin; St. Mary, Dublin; and St. Paul, Dublin; referred to the Committee.

Dublin and Drogheda Railway Bill.—Petitions against the Bill from Sir Robert Shaw and others; and landed proprietors and others of Kilsallaghan (presented 19th May); referred to the Committee.

Glasgow and Falkirk Railway Bill.—A petition from the Marquis of Bute, against the Bill; referred to the Committee, and counsel ordered.

Preston and Longridge Railway Bill.—A petition from the corporation of Preston, to withdraw their opposition; ordered to lie on the table.

LORD GEORGE LENOX.—To move for an extension of time for the London and Brighton Railway Committee to make their report.

THE FOLLOWING BILLS ARE IN COMMITTEE.—Dublin and Drogheda Railway; Deptford Pier Junction Railway; Manchester and Cheshire Junction Railway; Merthyr Tydfil and Cardiff Railway; Lambeth Improvement; Aberavon Harbour; London and Croydon Railway; London and Norwich (Eastern Counties) Railway; Midland Counties Railway (re-committed Bill); Clyde Navigation; London and Blackwall Railway; London and Blackwall Commercial Railway; London and Brighton Railway (St. James's Line); London and Brighton Railway (Rennie's Line); London and Dover (South Eastern) Railway; London and Cambridge Railway; Durham (South West) Junction Railway; Parrett Navigation; South Durham Railway; Newport (Monmouth) Harbour.

PROCEEDINGS OF SCIENTIFIC MEETINGS.

GEOLOGICAL SOCIETY.

May 11.—Mr. LYLE, President, in the chair.

A paper by Mr. Murchison was read, on the Dudley and Wolverhampton Coal-field, and on the formations connected with it; followed by a description of the Lickey quartz rock.

This is one of a series of papers, in which the author has described the border counties of England and Wales, and the southern part of the principality.

The great coal-field of Dudley and Wolverhampton, the most productive in the central part of England, is geologically distinguished by the total absence of the mountain limestone and the old red sandstone, which form the fundamental rocks of so many of the coal tracts of Great Britain. In a previous memoir, the author showed that the visible portion of this field is surrounded by the lower divisions of the new red sandstone series, which probably overlap and conceal, to the eastward of the exposed strata, numerous rich beds of coal.

The formations which constitute the sub-strata of the district, are known only by their irregular protrusion through the coal measures near Sedgley and Dudley, and through the new red sandstone at Wallsall, or by having been reached in some of the deepest pits. These rocks belong to the system to which Mr. Murchison has given the name of Silurian, and compose the greater part of the border counties, with Carmarthenshire and Pembrokeshire.

The structure of the coal-field is first described, and shown to consist of two series of strata, the upper part characterized by the presence of the "ten yards, or Dudley coal," the lower by numerous layers of argillaceous carbonate of iron, and called by the colliers "the iron-stone measures," and from which is obtained the celebrated Stourbridge fire-clay. The former occurs in the centre of the coal-field around Dudley, Bilston, Wednesbury, Netherton, &c.; and the latter at its southern and northern extremities, including the country immediately to the east of Wolverhampton.

The fossils hitherto discovered in the principal workings are land-plants and fresh-water shells, but in the lower, or iron-stone measures, have been found the remains of fishes. *Megalichthys Hibbertii*, *M. sauroides*, *Diploodus gibbus*, &c.; thus establishing an identity with the fossils of Burdie House, near Edinburgh. In the coal-field of North Staffordshire the same fishes have been also obtained by Sir Philip Egerton, and in that of Coalbrook Dale by Mr. Prestwich; but in the Dudley field no alternations of marine with fresh-water testacea have been observed, and, therefore, Mr. Murchison infers, that the coal measures of the district under review were accumulated exclusively in fresh water.

The strata belonging to the Silurian system present dome-shaped or irregular masses, and from the position which they occupy, it would be impossible to determine their relative antiquity, had not the author previously studied similar deposits in districts where the order of superposition is well displayed; and if the organic remains had not afforded abundant facilities for comparison and identification.

The strata belong to the two upper divisions of the silurian system, the Ludlow rocks and the Wenlock limestone. The former consisting of limestone, overlaid by thin bedded sandstones, are displayed at three points, Sedgley, Turner's Hill, and the Hayes; and the Wenlock limestone occurs near Dudley's forming the Wren's-nest, the Castle-hill, and the Hurst-hill; and on the eastern side of the coal-field it constitutes the district on which stands the town of Wallsall. It has been also found beneath the coal measures. This deposit has been hitherto called the Dudley limestone, and has been long distinguished by the number and beauty of its organic remains, but the author has changed the name to Wenlock limestone, as, from the position which it occupies near Dudley, its place in the geological series cannot be determined without reference to other districts, while in the neighbourhood of Wenlock its true position is fully displayed.

The quartz rock of the Lower Lickey Hills is next described, and proved to be the oldest formation of the district belonging to that division of the silurian system, to which the author has applied the name of Caradoc sandstone. The hills form a narrow ridge, about three miles long, but not exceeding 500 feet in height. The quartz rock of which they are composed, the author conceives to be an altered sand-stone, which has been acted upon by trap, having observed that the equivalent sandstone in the wrekin, caer, caradoc, &c., assumes the same hard quartzose character whenever it is in the vicinity of trap-rocks.

A minute description is afterwards given of the trap-rocks, both with respect to their mineral composition, and the effects which they have produced on the physical features of the district. To their agency the author ascribes the protrusion of the silurian rocks, the great lines of fissure which traverse the country, the faults which affect the coal measures, and the elevation of the coal-field itself through the covering of new red sandstone, which once extended over the area now occupied by it; and in conclusion, he adverts to the arguments which he had advanced on former occasions, respecting the probable existence of great deposits of coal beneath the new red sandstone, in parts which have not been exposed by volcanic agency, or hitherto examined; and he expresses great satisfaction in Mr. Prestwich having advocated similar opinions in the paper lately read before the society on the coal-field of Coalbrook Dale.

PROCEEDINGS OF PUBLIC COMPANIES.

IMPERIAL BRAZILIAN MINING COMPANY.

A general meeting of the proprietors of this company was held at the London Tavern on Thursday last, pursuant to advertisement.

JOSHUA WALKER, Esq., in the chair.

The advertisement having been read, and the former minutes confirmed, The chairman proceeded to read the report of the directors. It entered into a full detail of the affairs of the company, and referred to several letters from Mr. Hocheder and Mr. Hoskins, all of which represented an unfavourable state of the mines, and a deficiency of produce; and from the statement of the accounts, it appeared that there was a diminution in the receipts to the amount of 3000*l.* since the last meeting.

The chairman then proposed that the report and accounts be received and printed; when

A proprietor asked, "whether, in consequence of the deteriorated state of the mines, any measures had been taken here to reduce the expenditure?"

The chairman, in reply, stated, that from a feeling of sympathy with their fellow proprietors, the directors had that very day determined to announce to the meeting their intention to relinquish the present half-year's salary, but as they had by that day's packet received very favourable intelligence from the mines, which he would read by way of postscript, it was not thought necessary to make the announcement. He would, therefore, read the gratifying communication, which would, no doubt, give universal satisfaction, and justify the most sanguine expectations of the proprietors as to the ultimate success of the undertaking.

A resolution that the report and accounts be received and printed, having been carried unanimously, the chairman read the postscript, the whole of which will be found in our mining correspondence, and which was received with enthusiasm.

We have not room for the gloomy representations contained in the report, but we cannot refrain from giving a statement of the workings, from which it will appear that during four days upwards of 241 *lbs.* of gold was the result of the workings, forming a strong contrast to those which it has been our duty to report of late; while, judging from the reports of earlier days, we have no reason to apprehend otherwise than that the success now attendant, the undertaking may be of a permanent nature.

Workings from the 25th January to the 22nd February, 1835—
To February 6—8 days 6 11 13 16
17—9 days 32 7 7 0
18 116 7 0 0
19 102 5 4 12
20 17 2 3 12
22 4 10 6 12
— 21 days 241 0 14 13

lbs. 311 11 10 8
Four o'clock, Feb. 23.

I have great pleasure in stating that I have just left the washing-house, and there is every likelihood of 30 *lbs.* to-day, or little short of it, and we hope for something handsome to-morrow.

R. HICKSON.

A vote of thanks to the chairman and directors was carried by acclamation, and the meeting dissolved.

COLOMBIAN MINING ASSOCIATION.

A special general meeting of the proprietors of this association was held at the office of the association, on Thursday, the 12th inst.

J. D. POWLES, Esq., in the chair.

The advertisement having been read, the chairman stated, that they had met that day for the purpose of confirming the resolution passed at the last meeting, and which were unanimously confirmed.

The returns for January, it was stated, were expected to amount to 62 *lbs.*

The next meeting will take place on the third Thursday in June next, when a dividend will be declared.

[For remainder of Reports of Public Companies, see page 173.]

MINING CORRESPONDENCE.

ENGLISH MINES.

HAYLE CONSOLS MINING COMPANY.

May 9.—Since my last we have been employed in clearing a shaft at Trevigla mine, and erecting a whim on a lode to which we have holed at our ten fathom level, and which appears to be a promising lode containing tin. We expect to get the whim at work in a few days, when we shall be enabled, by clearing the rubbish, to lay more of this lode open, and to form a more correct judgment of its value, and also to commence clearing towards Wood's lode. Lyon's lode at the ten fathom level west, and the other parts of the mine, are nearly as when I wrote you last. We expect Ellevand's engine-shaft, at Busworgie mine, will be sunk to a twenty-six fathom level by the end of this month, when we shall commence driving east and west on the course of the lode, and hope to find it productive. We are preparing to sink Blunt's shaft below the fifteen fathom level on the course of the lode, and in apparent tin ground in the other parts of the mine. We have nothing new to mention.

KERRON MINING COMPANY.

May 9.—We are glad to say that the heavier or principal parts of our engine are cast, and that we intend having them on the mine in the course of next week. In reference to the stamps our progress has been impeded, in consequence of meeting with hard ground in the Lobby and Wheel Pit; however, we think we shall complete it in the week after next.

RICHARD RODDA.

REDRUTH UNITED MINING COMPANY.

May 9.—The lode in the engine-shaft is just as was stated in my last, which we are sinking one foot and a half per week, producing about 30*l.* worth of copper ore per fathom. There is an alteration in the thirty-two fathom level west of Cock's shaft; the lode at present is more promising for tin than copper, producing good stones of tin ores. The lode in the thirty-two fathom level east of the engine-shaft is about three feet wide, producing tin ores. The lode in the mine, bottom of the twelve fathoms east of Gooding's, is about two feet wide, not rich. The lode in the pitch, bottom of the 20 fathom level west of Cock's shaft, has failed much. Every other part of the mine is just as last reported. At Cljeh we have made a beginning to drive the thirty fathom level north towards the tin lode. The lode in the twenty fathom level west of the shaft is small and poor at present. At Buckett's we have cleared and opened Buller's shaft about six fathoms and a half under the twelve fathom level. Ashton's shaft is down about twelve fathoms under the adit level. The lode in the adit level west of the adit shaft will produce about half a ton of copper ore per fathom.

RALPH GOLDSWORTHY.

REDMOOR CONSOLS MINING COMPANY.

May 9.—Owing to our summer having been employed in altering the pit-work at Johnson's shaft, there has not been much done in driving the levels during the past week, except on the lode at the adit level east of the cross-course, which continues very promising, as last noticed.

WILLIAM PETHERICK.

TAMAR SILVER LEAD MINING COMPANY.

May 9.—The sinking lift is dropped to the sixty-five fathom level; we are preparing the railroad at the forty-five fathom level, against the steam-whim goes to work, which will be in a few days. Our other preparations are proceeding satisfactorily.

THOMAS PETHERICK.

EAST CORNWALL SILVER MINING COMPANY.

May 9.—Having nearly completed cutting the ground in the engine-shaft for the plunger-lift at the thirty-five fathoms level, we shall proceed to fix the lift forthwith, on receipt of the necessary materials, which are hourly expected. We are proceeding with the clearing of the levels, and hope soon to be in a situation to open new ground on the lodes extensively. We have forwarded to London samples of silver and other ores broken from various parts of the mines, the result of which, we hope, will be found, on assay, to be very satisfactory.

THOMAS PETHERICK.

ALBION MINING COMPANY.

May 10.—In consequence of altering our pitwork from the forty-seven to the sixty fathom level, at Wheel Liberty, there has been but little done in the sixty fathom level during the past week. I am glad to state, since our last, the lode in the forty east, on the counter, has improved at present—it would produce two tons per fathom. The lode in the forty-seven east, on the counter, is three feet wide, producing half a ton per fathom. The lode in the forty-seven east from cross-cut, on the north lode, is about fifteen inches wide, producing two-thirds of a ton per fathom, and has a favourable appearance. Our tributors, on the whole, appear to be doing well. Wheel Mithian engine-shaft is sunk under the fifty-four fathom level; two fathom lode is still exceedingly large, yielding a large portion of muddle. The lode in the ten fathom level east from shaft, on the south lode, is in a disordered state. The same level west from shaft lode is about two feet wide, and has a kindly appearance.

POLBREEN MINING COMPANY.

May 7.—Referring to the underground workings of this mine, I do not see the least alteration since my last, excepting that the lode in the flat-road engine-shaft (within the last two or three days) is improved; the prospects here are certainly most encouraging, having a continuation of a rich course of tin. The engine is all supplied to the mine, and we expect to receive the remainder of the pitwork this day.

RICHARD ROWE, Jun.

SOUTH WHEAL LEBRE MINING COMPANY.

May 7.—This day we again set the engine-shaft to sink below adit, and, with the assistance of the water-whim, we have not the least doubt but what we shall be enabled to complete the sinking of said shaft down to the first level (fifteen fathoms), which will be of considerable advantage to the engine when prepared to work, and in the course of a short time we intend to commence putting the engine together. The masons are getting on rapidly with the building of the stack, &c. The smiths' and carpentry work are also in a forward state.

RICHARD ROWE, Jun.

ROCHE ROCK MINING COMPANY.

May 9.—There has no change taken place in any of the levels or pitches during the past week; they continue equally productive to former reports, and can be wrought with expedition. The south lode, on the back of the sixty fathom level, during the last two months, produced eight hundred tin per one hundred sacks; this will be considered pretty good work, and there is no sign of any less favourable change. The quantity of tin calculated to sample on Friday next is sixteen tons—this is an increase on the former months (without any additional cost), and speaks satisfactorily of our progressive improvement.

SAMUEL ROBINS.

BRITISH TIN MINING COMPANY.

Great Wheal Venture, May 9.—The middle lode is from five to six feet big, very hard, but producing good work—much improved since last report. The ground east on the counter lode is rather spare; the lode is from nine to twelve inches big, producing good stones of tin. The ground in Rowe's mine is spare; the lode is from two to three feet—its size just as last reported. The Gwoll-hill end is much eased—the lode is much the same as last week. We have coming into the engine-shaft another part of the lode, about two feet distant from the former, which will impede our progress. The lode is a little more productive of tin.

JOHN BRAY.

NORTH CORNWALL MINING COMPANY.

Wheal Thomas, May 7.—During this week we have had a good lode in the bottom of the seventeen fathom level east. We have commenced driving south from Wheal Thomas engine-shaft to the twenty-six fathom level, to cut the lode at this place. I consider, from the underlay, that we have about three fathoms to drive. We have fixed a lift to take the water from the adit to the surface at Wheal Hope engine-shaft, in order that the same may flow over Wheal Thomas water-wheel, which will enable us to keep the water in Wheal Thomas engine-shaft without any hindrance whatever. We have not done any thing in the eight and seventeen fathoms west this last week. In the eight fathom level east the ground is harder than we wrote last.

Wheal Hope.—We intend almost immediately to put down a lift under the fifty-eight fathoms level, which will draw the mine in a short time to the bottom. We have set a rise from the thirty-eight fathom level, to raise in the lode mentioned to you in our last report. At this place we expect to raise some lead. The general appearance of our levels in this mine is much the same as when we reported on them last. We calculate, according to the lead dressed, and what is to dress, that we have raised as much lead from these mines during the past month as we expected, viz. twenty tons. From the settling report, which will accompany this, you will perceive we have set nine tub-work bargains, and six tribute pitches.

JOHN BORLASE.

ST. HILARY MINING COMPANY.

Wheal Leeds, May 7.—Annexed you have the particulars of our setting in Wheal Leeds this day. Since my last communication we have cleared into a constant work at the twenty, which was driven when the mine was worked

in former times, and have discovered a copper lode, which we have lost time in putting men to drive and extend on it to the east; the lode we been driving on in our eastern level at the twenty possesses favourable indications; but it has been considered best for the moment, in consequence of this discovery, and before we have opened upon it a few fathoms, to stop that end for a short time, as it is possible that the lode there is only a branch of the main lode, the lode we are now driving on, and that they will approximate going east. We have thought it advisable, in the cross-cut drive south at the twenty, in order to cut the south lode, to put the men to work on a branch we have cut, which may prove to be the south lode, part of it. The new engine-shaft in Wheal Leeds continues sinking at the thirty fathom level, but we have a hard floor of ground in the shaft present. You will observe that we are paying now 19*l.* per fathom; we eat nine feet at that price, as from the nature of the country, and what have proved before, those floors are of so long continuance. We are driven at the same time south at the thirty, to unwater the whole of the old workings from the twenty to that level, which will be accomplished by the mid of next week.

C. BEATER.

ST. NEOT'S AND ST. CLERE CONSOLIDATED MINES.

May 8.—The operations here are now wearing an appearance of activity. On Gonion Down we are raising considerable quantities of ore from the Punch-bowl shaft, and more than 100 tons of good stuff are waiting the erection of stamps. We are driving on this lode, which is from two three feet big, at a depth of about seven fathoms, and breaking out for 300 fathoms. The twenty-five fathom level is now within a few fathoms of this lode, and another shaft will be sunk on it immediately, from which anticipate a favourable return as at the Punch-bowl. Our western level has been driven about 100 fathoms, and will shortly be home to the 6 lode, on which a shaft is sinking. The ground in both these levels is very easy fine white killas, and set at 12*l.* per fathom, though firm enough stand without timber. Our north level, which will cut the lode at fifty-sixty fathoms, has been driven sixty; we are now sinking an air-shaft on, by the aid of which we shall be able to reach the north lode (John's) by the time the working shaft is down. We have just opened on another lode, five feet big, from which we are raising work. The stamps will be next week, and others will be put to work with all possible expedition. Wheal Bank the old level has been cleared up about eighty fathoms; and the lode copper proves large and kindly, with a fine strong gossin. At 7 Hatches, after clearing up an old shaft to the depth of seven fathoms, a very rich lode of tin was cut, about one and a half fathoms from the shaft, and now producing a most excellent pile of work. The lode is judged to be worth 20*l.* per fathom, the expense of raising which is only 25*l.* At Trengle's lode continues large and kindly, carrying tin; but little has been done here many of our hands being engaged in constraining and exploring the old workings.

URIAH ROW.

NEW SOUTH HOOD MINING COMPANY.

May 6, 1835.—We have cut in the cross-cut driving west four branches of sluice; from the west branch to the eastern one is about nine feet; the lode and muddle in one of them, but I do not consider that is the lode before I have driven nine feet more, to prove whether it is or not; if it is the lode, it is split up into branches; by driving three or four fathoms I expect they will come together again. If it is the lode, I have been told several times that it has been split up in branches at Old South Hood, where the branches have been so much as thirteen feet asunder. We have driven in the deep adit ten feet, the ground at present is looking more favourable than has been for some time.

JAMES WILLIAMS.

PERRAN CONSOLS MINING COMPANY.

May 9.—We have not yet discovered either of the lodes (Mudge's or Anthony's) to the east of the slide, nor have we met with any alteration in the other parts of the mine, since my last report; and beg merely to add, with respect to our surface operations, we are getting on with as much dispatch as possible.

RICHARD ROWE, Jun.

EAST WHEAL STRAWBERRY MINING COMPANY.

May 9.—Trevithen south (copper) lode, at the fifteen fathom level, at Roberts's shaft, is extremely promising; the prospects are very encouraging for the next level, the state of the lode being very similar to what we have previous to our cutting it, rich in the level above. The pitches are looking very well indeed. We are dressing our ores, including those left from the last sampling, and we expect to have a good parcel for our second sampling to follow the sale of 100 tons on Thursday next. At Orchard we cannot yet work below the adit level; but with the little ground which we have opened, the tributors are doing very well. On Saturday last we set the machinery of an engine-house and other buildings, for erecting a steam-engine for draining the water, for exploring this productive lode at a greater depth and also for stamping the tin stuff.

WM. PETHERICK.

NORTH CONSOLS MINING COMPANY.

May 9.—In the past week we have been chiefly engaged in removing, putting up whims, opening old shafts, so as to make it more convenient for clearing the old mine, also dropping lift, &c. In Wheal Hutons engine-shaft we have dropped to the depth of forty-two fathoms under the adit, and if we continue to work as we are working now, we shall look to the forty-two this week; we are at hand clearing the old places as fast as possible, and when we find whole ground we find ore. We have a large lode in the twenty fathom level west from engine-shaft, composed of some excellent good yellow ore muddle, peach, spar, and very little jack; and at this time a very promising appearance. The lode in the thirty, near Williams', at this time small, and not a very favourable appearance. The tributors who are working here at this time are doing very well. We shall sample about eighteen tons of ore to-morrow; we cannot say its quality until we get the assays.

THOMAS TIFFEY.

WHEAL SISTERS MINING COMPANY.

May 9.—I have much pleasure in informing you that we have a very rich leader of silver, east of Wall's shaft, above the adit level, and that we are rising three, and some days four, bags of rich work. The shaft is holed to the ten fathom level, and we shall now commence driving the mid level again, which has been idle some time. The lode in the adit is very promising, and things generally looking well.

J. MALACHY.

WHEAL BROTHERS' MINING COMPANY.

May 9.—Since the last report there has been nothing done at the thirty fathom level, in consequence of the water in the mine; it has been up to very near the twenty fathom level. The cause of it was the falling off of the surface water, and our large repeating engine not being exactly complete; this, however, is now at work, and the mine will be drained by the morning. The pit is finished at the forty fathom level, and we have commenced driving towards the lode, which will be opened in about a fortnight. All other parts of the mine are much the same as in last report. We have opened on the surface part of the lode at our western boundary, and have sunk about twelve feet on it; at this place it is from three to three feet and a half wide—a most promising gossin, with silver throughout.

J. MALACHY.

HOLMBUSH MINING COMPANY.

May 9.—I have much pleasure in informing you that the lode in the sixty-two fathom level east in three feet and a half big, with rich stones of ore, and improving every fathom we advance. In the said level west we have a good course of ore, a foot big, and lode very kindly. The lode in the thirty-two fathom level east is two feet and a half wide, very kindly, and all saving work. In the thirty-five fathom level west, the lode is again improving with a rich leader of copper. The pitches are looking well. We shall ship seventy tons of ore per first vessel that sails.

J. MALACHY.

EAST WHEAL BROTHERS' MINING COMPANY.

May 9.—We are going on regularly in driving the adit north towards Wheal Brothers lode, and I think we shall intersect it in about two months at the boundary between this and Wheal Sisters east. In driving the adit east, on the East Cornwall (or Well) lode, we have a rich branch of copper ore, eight inches wide, in a large and promising lode, which is likely to be a very good thing. In fact, it is the most encouraging discovery in the district. I am persuaded this will make a great and good mine.

J. MALACHY.

WEST WHEAL BROTHERS' MINING COMPANY.

May 7.—The monthly settling having taken place this day, herewith you have the extent of the lode excavated at the twenty fathom level at Lorne's shaft. There has been seven fathoms two feet driven west of the cross-cut; the average size of the lode is two feet and a half wide, producing some good silver ore of very superior quality. I do not think it right to interfere with the bottom of the level before the lode is cut at the thick, as it cannot be worked in a proper manner for the interest of the proprietors. There has also been driven four fathoms three feet east; the lode has been very regular, about eighteen inches wide, with a branch against the south wall, producing specimens of superior quality, containing grey oxide, with wire and native silver. The copper lode in the twenty-three fathom level, at Henric's shaft, still continues from four to five feet wide; its quality just as last reported.

JAMES CARPENTER.

The following is an extract from a letter of one of the shareholders, dated May 3, and transmitted to us.

"I have this day been underground at West Wheal Brothers, and have had one broken out of the different parts, namely, the lode, and the east and west ends at the twenty fathom level, and have had assays made as under. I am quite astonished at the produce, and must tell you that our prospects are very great. Captain Carpenter is in the west, but I shall take care all is right."

"No. 1. From the back of the twenty fathom level, about 6000 ounces per ton.—No. 2. From the bottom of same level, 4500.—No. 3. From the eastern end, 2000.—No. 4. From the western end, 800."

EARN GREY MINING COMPANY.

May.—The ground in Minear adit end is more favourable than it has been for some time past; we are now denuding Pitt's lode west from the cross-cut, and hope, by next report, to communicate to you its quality. At present we have taken our men from the deep adit, and have put them back to sink on Guma's lode, in which we have an excellent branch of tin; the branch is small, but very good; this tin we shall return as soon as possible. At our engine-shaft in the twenty-two fathom level we have drained the whole of the water from the level above; in consequence of which we shall be able (without any particular impediment) to sink from the twelfth to the twenty-two fathom level, and when this is done we shall ascertain what tin-ore we have from one level to the other. RICHARD RODDA.

OLD MOOR MINING COMPANY.

May 9.—The walls of the smith's shop, counting-house yard, and carpenter's shop, are nearly complete, and we shall lose no time in putting on the roof as quick as possible. Our engine-shaft (in which we have nine men) is now down about five fathoms and a half, and we hope, by prompt attention and a little improvement on the plans of our predecessors, to sink and secure our shaft to the lowest level. Saunders' lode is still presenting a very favourable appearance; it contains some good stones of tin, and I have no doubt that we shall have a great deal of tin before we get twenty fathoms deep. The size of the lode we have not yet ascertained. RICHARD RODDA.

TRELLEIGH CONSOLS MINING COMPANY.

May 7.—We have extended the adit on the north lode five fathoms, and have set it again to four men at 55s. per fathom; the lode is larger than it has been for some time, and the quality just the same; there appears to be a cross-slide in the end, which I expect will alter its appearance. The stopes in the back of this level are looking better than they were last survey day. The men have stoped nine fathoms four feet four inches, and taken it again at 45s. per fathom. We have as much ore broke as named in my last. W. SINCOCK.

BRITISH COPPER MINING COMPANY.

Great Wheal Charlotte, May 11, 1836.—Although the special reporters may have said that we shall not be able to increase the returns until we have opened a considerable distance on the sixty-two fathom level, I am sure we shall the moment we cut the lode at that level, unless there should be a falling off in other parts of the mine, which, from present appearances, the contrary is what we fairly expect. I do not see where we can suspend a single tub-work bargain without injury to the mine, if we do tubbing will suspend itself, for tubbing is what fuel is to fire. It is our intention to attach the crushing machine (which is now worked by water) to the steam when it is erected, the doing of which will save 4l. to 6l. per fathom. The north lode at Williams' adit level is two feet big, yielding good stones of ore at this shaft; on the north lode and branches we raised fifty tons of ore in the last two months. In the 22 fathom west the lode is improved in appearance and quality; during the last week we have raised ore of excellent quality from this level, and if the ore continue we shall soon be able to set tubbing to work to profit. The lode in forty-two fathom level end east continues kindly, and in from six to seven feet wide, yielding good work. The lode in the 52 fathom end west is from eight to nine feet wide, yielding good stones of ore, but the lode taken altogether is not rich; the lode in the back two fathoms behind the end is eight feet wide, yielding from five to six tons of ore per fathom. The lode on the 52 east continues to improve, it is six feet wide, and softer than it has been before in this level, and as the end is just upon the margin of the declivity of the hill on the east side of the mine, it is probable that the lode and strata will yet be softer. The appearance of the lode in the different pitches are much the same as for several months past. J. STEVENS.

UNITED HILLS MINING COMPANY.

May 9.—Back of adit level, east of Diagonal shaft and the end lode, is two and a half feet wide, a foot and a half of which is very good for ore; the lode in the back is larger. Adit end to drive west of Diagonal shaft lode is six feet wide, ore throughout, but coarse in quality. Ten fathom level east of James' shaft, lode four feet wide, with good ore throughout; solid produce four tons per fathom. Ten fathoms level east Diagonal shaft lode, three feet wide, kindly, with stones of ore. Ten fathoms level west, and back over 14 feet wide, two feet of which very good ore, then do not exceed ten fathoms to communicate to the said level east of James'. Twenty fathoms level east of Diagonal shaft lode four and a half feet wide, coarse in quality, though rather improved of late. Twenty fathoms level west of Diagonal shaft and back lode four feet wide, two and a half of which very good ore, and the back also good for ore. Back of twenty fathoms level west, this level is not more than two fathoms north of the south lode, which was also very productive; opposite this place we are now cross-cutting from one to the other. Twenty fathoms level east of Diagonal shaft lode four feet wide, two and a half of which is ore, of fair quality, and the end is improving. Thirty-six fathoms level, west of Diagonal shaft lode, five feet wide, with good stones of ore, and just under the winze in twenty fathoms level. Thirty-six fathoms level east of Turton's shaft, lode three and a half feet wide, promising with stones of ore, and very much improved of late. Thirty-seven cross-cut east of Turton's shaft, it is not necessary to get a winze down to the thirty-six; and supposing we are not on the same part as thirty-six, we purpose cross-cutting, to ascertain the fact before sinking the winze. A winze to sink to the eleven fathoms level east of Counting House shaft; as it is also necessary to drive the eleven fathoms level east in the old mine, we purpose first hoisting a winze from the adit, which was partly done some years since. A new shaft to sink from surface east of Diagonal shaft, the adit end being extended some distance east of the Diagonal shaft, we consider it proper to get another shaft down, about fifty or sixty fathoms east, on the course of the lode, in order to prove the ground, and ventilate the levels below. We have suspended the new perpendicular for a short time, till a proper situation can be decided on, which we hope soon to determine.

FOREIGN MINES.

IMPERIAL BRAZILIAN MINING COMPANY.

Gongo Soco, Feb. 23.—We had last the honour to address you on the 18th inst., of which the foregoing is a copy, and we still remain deprived of any intelligence from England. As you will be anxious to know the result of our late successful proceedings, we take advantage of the extraordinary post to Rio to inform you that the pleasing expectation held out in our despatch of the 18th inst., as to the mine produce, was fully realised; that the following day (the 19th) having yielded 219 lbs. weight of gold, being a larger quantity than was ever before produced in the two succeeding days from the Gongo Soco mine. We called upon the captains to furnish us with a report from themselves as to their operations, &c. at the mine, for your information and satisfaction, and we requested them to furnish answers (also for your information) to a few queries which were proposed to them; the second with a view of showing the fact as to when the side level was driven, that you might receive an open and general statement from all your captains.

Gongo Soco, Feb. 8.—Since we had the honour to address you to the 29th ult., of which the foregoing is a duplicate, we regret to say that we remain deprived of any intelligence from England.

JOHN MORGAN, RICHARD HICKSON.

Gongo Soco, Feb. 18.—The foregoing is a copy of the letter we had the honour to address you under date of the 8th inst., and it is with regret that we have to state that we remain deprived of your further commands. Should tomorrow's post not bring us some intelligence, we shall really begin to entertain some apprehensions for the safety of the December packet.

We rejoice that we have at length the good fortune to congratulate you (which we do most sincerely) on the unexpected change in the mine produce, and we now give you the information we have been enabled to obtain on the subject.

The day before yesterday (the 16th instant), Captain Bray placed one of the backmen to make a small cross-cut for the convenience of clearing stuff from the old workings, about four fathoms east of Gibson's cross-cut in the horizon of the thirty-four fathom level, who had driven about four feet, when Captain Collings visited him yesterday morning, who had the good fortune to discover a very rich branch of gold in a branch supposed to belong to the south lode, but as we expect that this information will be fully given in the mine-captains' report, we beg to refer you thereto. Captain Collings immediately commenced working himself, and never left the spot until four o'clock p.m., when relieved by Captain Bray, they sent up no less than eighteen boxes of rich stuff between the time the discovery was made and about half-past seven last night, when the latter captain left off; but from the lateness of the hour it was found impossible to wash more than between 23 and 24 lbs., leaving a very large quantity for this morning, of which we have already seen 25 lbs. washed and dried; about the same quantity is now ready to be dried, and every exertion is being made to have as much as possible washed up to-day before dark: the boxes are still coming up fast, and the stuff continues apparently as productive as the first. Half-past three o'clock Mr. Hickson has this moment returned from the mine washing house; there is upwards of seventy lbs. certainly up to this moment already washed, and although he feels cautious in asserting it, he will say that if it is possible to have it washed up before dark he thinks there will be 100 lbs. or little short of it; and we have the great satisfaction to add, that the vein retains a very favourable appearance. JOHN MORGAN, RICHARD HICKSON.

Rio Janeiro, Feb. 25.—I avail myself of the opportunity of the first vessel that leaves this port for England after my arrival, to report to you my having safely reached my destination thus far with the party under my charge, after a long but pleasant passage of seventy-four days, on the 18th instant. I have been fortunate enough to find a tropic to take charge of the men's luggage and of my own, which will be despatched to-morrow. The miners will follow the next day, and I shall not allow myself to be de-

tained here one moment later than it is absolutely necessary to carry into effect those objects to which I am by your instructions directed to attend during my passage through Rio de Janeiro. Mr. Simoes's letter of the 17th December fortunately reached me on the 21st instant, and enabled me to present myself to Mr. Ouseley (his Majesty's chargé d'affaires) with Lord Palmerston's letter, and I shall thus be introduced by his Majesty's representative to the Regent and to the ministers of this empire. Mr. Ouseley has appointed to-morrow for that purpose. I beg to forward herewith the despatches from Gongo Soco, which I found on my arrival here at Messrs. Naylor's, and which agreeably to your instructions I have opened and perused. I regret to observe from these despatches that the mine is at this moment very poor. I shall address you again by the Nightingale packet, appointed to sail on the 4th proximo, and until that remain, &c. G. V. DUVAL.

Rio de Janeiro, Feb. 25.—We wait upon you with a copy of our respects of 13th inst. per Urania, with bill of lading for the gold dust shipped by that conveyance, with another note of expenses on the same. By the Nightingale packet, and the Onyx, from Liverpool, we have received your communications of the 3d and 14th December, the latter a copy—the Meanwell being still out: we have also received your secretary's letter of December 17, and shall answer the whole on the return of the Nightingale. Mr. Duval informs us that he is writing to you by the Medusa, and he will doubtless forward the communications from the committee of management, all which are in his possession. NAYLOR, BROTHERS AND CO.

Rio de Janeiro, March 7.—We wait upon you with duplicate of what we had the honour of writing to you by the Medusa, on the 25th ult. The Meanwell, from London, and the Spider packet, have since arrived, and to avoid any confusion, we shall defer a detailed reply to your dispatches until the return of the packet now in port, when Mr. Duval will be on his journey to Minas Geraes. NAYLOR, BROTHERS AND CO.

Rio de Janeiro, March 6.—By this opportunity I forward a duplicate of my letter of the 26th ult. I beg to congratulate the Board and the shareholders upon the favourable accounts contained in the letters from the committee, and I sincerely hope that a new career of successful mining operations has commenced at Gongo. It will, I am sure, be the wish of every part of the establishment to contribute thereto in their respective stations to the utmost of their power. The miners started for Gongo under the charge of John Hardecastle, on the 27th of February; some delay was experienced in procuring horses for their journey, which are rather scarce here at present; and this circumstance, combined with the business I had to attend to, has also contributed to keep me here much longer than I wished to remain, particularly at this season, which has been hotter this year than for a very considerable number of years past; we have, however, managed to keep all the party in tolerably good health. I have also waited upon the Emperor (to whom I was presented), and upon the Regent, and the ministers of state, as well as upon every influential person connected with public affairs, to whom I could gain access. After waiting for several days for an appointment through the Foreign Office, to be presented to the Regent by the British minister, I have, with Mr. Ouseley's advice, called upon the Regent alone, and after many attempts, have at length succeeded in seeing him this very day. It was at his public audience, and our interview was therefore short, but I afterwards saw his private secretary, with whom I could and did enter into more details, but these, however, only of a general nature, and tending to explain more clearly than could be done in a public audience who I was, so that I could be known in case of any official application being made by me hereafter, on the part of the association. Having thus, as well as circumstances will allow, attended, during my stay at Rio for that purpose, to the various points to which my attention was directed by your instructions, I shall lose no time in proceeding to Gongo, for which place I start the day after to-morrow, at day-break. I omitted to state that I have re-engaged in the service of the association, for a further period of three years, subject to your approval, the blacksmith, Richard Luke; I did so upon the very favourable testimonials given by the committee of management, and upon the recommendation of Capt. Trengoon, and his statement that blacksmiths are rather short in the service at present. G. V. DUVAL.

SPECULATIONS OF 1825 AND THE PRESENT DAY.

The extent to which speculation was carried in the years 1824 and 1825, and the mania which now exists have, we are glad to find, excited the attention of the press, which is generally doing its duty in cautioning the public from heedlessly embarking in schemes, projected as many are by parties who have not the slightest idea of carrying them into effect, their object being attained by the premiums to which the shares are carried. It is gratifying also to find that some of the most talented of our representatives in the House of Commons have stepped forward to prevent, if possible, that ruin which must result from many of the speculations of the day; if that a considerable degree of caution be not exercised by those who, expecting to realize a fortune by a lucky hit, and who for the chance of so doing, are risking in many instances the hard earned wealth of past years, are induced to enter into speculations, with the advantages or disadvantages of which they are in perfect ignorance.

The following observations made by Sir Robert Peel, Mr. Poulett Thomson, and the Chancellor of the Exchequer, on Friday last, in the course of the discussion on the Budget, will, we doubt not, have the intended effect on many who might incautiously enter into schemes, and will be read with interest, as being opinions not hastily formed. In the discussion referred to,

Sir ROBERT PEELE observed that there was, it was true, great cause for congratulation in the present state of the manufacturing interests of the country; he believed that a great part of the present prosperity of the country stood on a stable foundation; he believed, that with peace in foreign countries, and in the hope that the South American provinces would be restored to a state of quiet and tranquillity, such was the elastic spirit of industry in this country, there was every reason to expect a continuance of that prosperity. But at the same time there were circumstances which would lead a prudent man to doubt. It was impossible to see the rapid rise which had taken place in every article of consumption without asking the question to what it was attributable; it was impossible to take up some of the newspapers, the Liverpool papers for instance, and not to see that they teemed with projects for joint-stock companies, exceeding in absurdity even the speculations of the year 1825. He had a few days ago received a Liverpool newspaper containing prospectuses which truly astonished him, as emanating from a town remarkable for the astuteness of its inhabitants, and for their general commercial success. The paper, however, contained projects for the establishment of joint-stock manufactures of a description which it was clear to any mind could only be conducted with success by individual enterprise. Now, coupling these two facts together, first, the rise in every article of consumption, and secondly, the tendency not to fair speculation, but to mad projects, he must say, without feeling or wishing to inculcate despondency, that he was a prudent man who used words of caution. It ought not to escape attention that a measure had been passed with a view of relieving country bankers from paying their notes in gold, and permitting them to exchange their paper for the paper of the Bank of England. He had always been afraid that the adoption of that measure would have a tendency to precipitancy, and therefore it was that he had regarded the adoption of the proposal with some anxiety. Now, whether the principle on which joint-stock banks were founded were sound or not, he was not at present prepared to say; but he saw in connexion with the speculations to which he had adverted proposals for a multiplication of those joint-stock banks, and he thought that, without resorting to inquisitorial inquiry, the Legislature had a right to require some general information as to the principles on which they were to be founded—some information whether or not there prevailed a system of granting accommodation to those who were partners in the banks in a manner that was not consistent with ordinary commercial pursuits. The commerce of the country was now proceeding with a flowing tide and a favourable wind; the country had every appearance of prosperity and happiness, but the Legislature ought to bear in mind, that from the commercial history of the country it was clear her commerce was liable to vicissitudes and changes, and therefore it was that he, without any feeling of despondency, but on the contrary believing, the great portion of the nation's prosperity rested on stable foundations, was of opinion that caution was necessary to warn the House and the country that that prosperity might not be permanent. Without advising any plan of inquisitorial inquiry into speculations, either by individuals or others, believing, as he did, that free agency was proper to be preserved, yet he thought that the Legislature ought to have information before it delegated to banks of issue the exercise of powers equal to the Royal prerogative in matters of finance.

Mr. P. THOMSON joined in the recommendation of prudence and caution, put forth, under the high authority of the right hon. baronet the member for Tamworth. He, in common with his right hon. friend, the Chancellor of the Exchequer, considered there was every reason to congratulate the country upon its present state of prosperity, but he must also say that at the present time prudence and caution were above all things necessary. In order that that prosperity should not be succeeded by revulsion. It was impossible not to be struck with the spirit of speculation at present prevailing. He believed that there existed this great difference between the speculations of the present times and those of the year 1825—viz., that the latter were

directed to foreign objects, while the former had relation to undertakings at home. They, therefore, were not likely to be productive of consequences so disastrous as those in 1825. But it was impossible for any man to turn to a newspaper or price-current without being struck with astonishment at the fever of speculation which at present reigned. He had had the curiosity—a curiosity consistent with his duty—to direct a registry to be kept of the proposals for joint-stock companies contained in the London and some of the country newspapers, and within the last two or three days he found that the nominal capital proposed to be raised by subscription was 200,000,000l., and the number of companies between 300 and 400. (Hear.) Among them was a proposal for a company to make sugar from beetroots. Another was termed the British Agricultural Loan Company, and he had been supplied by a friend with a note issued by this company, which ran thus:—"I promise to deliver on demand, to the order of, ten quarters of wheat, weighing six a-bushel, from the county of, and growth such a-year, and warehoused in some particular way, and on which all charges had been paid." He understood that this note was equal in value to 20l. Then there was the Metropolitan Pure Spring Water Company, with a capital of 300,000l.; the Patent Paddle-wheel Steam Towing Company; the Safety Cabriolet Company; the British and American Inter-course Company, with a capital of 2,000,000l.; and the London Whale-fishing Company, with a capital of 600,000l. Some of the joint-stock companies had not, however, such absurd or extravagant objects in view; but it sometimes happened that the purposes for which they had been formed were such as were often effected by individual enterprise. Thus at Liverpool a British and Foreign Trading Company was advertised with the small capital of 250,000l. Now, many hon. gentlemen were aware that individuals not uncommonly embarked that amount of capital in the foreign trade. These speculations had not entirely their source in London, as in 1825. They had extended into other parts of the country; and he could show the right hon. baronet who had alluded to the number of joint-stock companies advertised in a Liverpool paper, a newspaper published in the place he (Mr. Thomson) represented, containing propositions for the establishment of companies for objects not likely to prove beneficial to the country, and the only result of which would be to make the parties engaged in them lose their money. They were got up by speculators, whose object was, first, to raise the price of shares to a premium, and then to sell them, leaving those unfortunate persons who were foolish enough to stake their money in the speculations, to shift for themselves. But in endeavouring to check this extravagant spirit of speculation, great care must be taken not to throw odium or discredit on joint-stock companies. It was impossible to reflect on all that had been achieved through the agency of joint-stock companies without feeling that they had proved highly beneficial to the people of this country; and he regretted to think that even the formation of companies for good and fair objects might possibly be discouraged by the number of foolish schemes at present in agitation. The right hon. gentleman opposite had alluded to the state of joint-stock banks, and he (Mr. Thomson) regretted with that right hon. gentleman the great extent to which they had sprung up in different parts of the country. The observation he had applied to other companies was equally applicable to joint-stock banks. He believed they had been productive of great good, but he was also satisfied that there were some springing up which could only tend to great mischief. He held in his hand the prospectus of a scheme which had originated in Liverpool, for the establishment of a joint-stock bank, to be called the English, Scotch, and Irish Bank, with a capital of 3,000,000l. for England, and of 2,000,000l. each for Scotland and Ireland; and since there could not be a United Kingdom Bank, this prospectus held out the great advantage which the shareholders would enjoy in having banks in England, Scotland, and Ireland, connected with each other. One thing to be greatly deprecated was, the very small value of the shares in some of the undertakings. There was a joint-stock bank advertised, with shares of 10l. each; and another joint-stock company, with shares of 10s. each. Even supposing that these concerns proved solvent, and their management good (which he took to be next to impossible), still he did not think it desirable that joint-stock companies should be established with shares of so low a value. With reference to joint-stock banks which were good concerns, and where an immense amount of capital had been paid up, there had arisen a practice well deserving the attention of the House. The members of Parliament had been in the habit of considering it their duty to look most cautiously after banks of issue; but they thought that the banks of deposit were not likely to lead to mischief, and did not require to be placed under legislative control. In coming to this conclusion, they had relied on the prudence and caution of the parties connected with banks of deposit, on their managing their business on what he considered the only sound principle which the conductors of banks of deposit could adopt—namely, to deal with their own capital and that of the depositors, and not to speculate on the credit they might enjoy. But he believed a new practice had sprung up, and that a great deal was done by these establishments in the way of discounting their own credit. Thus bills which came in to them from their customers, and were taken at a high rate of interest, compared with the rate of London, were sent up to London, and these being indorsed with the name of the particular bank, and passing on account of its credit, a much larger number of them found currency than otherwise could have done so. To that circumstance was to be attributed, in some degree, the state of things which now existed; the high prices and the support given to the spirit of speculation, unaccompanied by any overwhelming increase of issue from the banks in the country or in London. So long as prices continued to rise, and the first givers of the bills were able to meet their engagements, so long no distress would take place; but as soon as prices fell, then would the penalty of the present state of things be paid. (Hear, hear.) He hoped and trusted that by prudence and caution adopted by the parties themselves any great injury to the public might be avoided.

Mr. RICE observed, that having thrown out some suggestions—not for alarm, but for caution and prudence—with reference to joint-stock companies, he was much gratified to find that he was supported in his views by the right hon. gentleman, the member for Tamworth.

We submit to our readers a summary of the companies formed in 1824 and 1825, with a list of those projects which have been brought out in Liverpool and Manchester since the commencement of the present year, reserving until our next those which have been formed in London, and which, with the observations we have already quoted, will, we hope, have the desired effect:—

COMPANIES FORMED IN 1824 AND 1825.

	Capital.	Shares.
74 Mining companies	38,370,000	537,200
29 Gas ditto	12,027,000	200,940
20 Insurance ditto	35,820,000	651,000
28 Investment ditto	52,600,000	686,500
54 Canal railroad, &c.	44,051,000	542,210
67 Steam	8,555,500	125,220
11 Trading	10,450,000	85,000
26 Building	13,781,000	164,900
23 Provision	8,360,000	674,000
49 Miscellaneous—existing	38,824,600	462,500
243 PROJECTED only	109,284,000	1,731,850
624	372,173,100	5,963,220

It appears from this table that the total amount of capital required for the six hundred and twenty-four companies, formed or projected in the years 1824 and 1825 was the sum of 372,173,100l., divided into nearly six million of shares (exclusive of many provincial companies, and others formed in Scotland and Ireland), without regard to Foreign Loans, amounting to 32,069,571l. In addition thereto, there was at that period one hundred and fifty-six companies (formed antecedent to the year 1824), the capital of which was 47,936,486l. 13s. 6d., divided into 764,534 shares, the amount paid thereon being 34,065,936l. 13s. 6d., and which were thus divided:—

Companies.	Capital.	Amount advanced.	No. of Shares.
63 Canal	12,202,096 0 0	12,202,096 0 0	175,374
7 Docks	6,164,590 12 0	6,164,590 12 0	57,582
25 Insurance	20,488,948 0 0	6,548,948 0 0	399,841
16 Water-works	3,973,170 0 0	2,973,170 0 0	39,760
4 Bridges	3,452,017 2 8	1,952,017 2 8	31,731
27 Gas	1,630,790 0 0	1,215,300 0 0	35,194
7 Roads	494,964 18 10	479,814 18 10	7,472
7 Miscellaneous	1,530,000 0 0	1,530,000 0 0	17,580
156 Total.	47,936,486 13 6	34,065,936 13 6	764,534
Companies formed in 1824 and 1825	109,281,600 0 0	15,185,950 0 0	1,618,340
Total.	150,718,086 13 6	49,251,886 13 6	2,382,874

[For conclusion of this article, see page 179.]

PROCEEDINGS OF PUBLIC COMPANIES.

ROYAL COPPER MINES OF COBRE ASSOCIATION.

The first general meeting of this company took place on Tuesday, the 26th ult., at the office of the company.

CHARLES P. GREENFELL, Esq., in the Chair.

The advertisement convening the meeting having been read, and the chairman having made some prefatory observations on the report which was to be presented to the meeting, which appeared to give satisfaction.

The following report was read:—

REPORT.

The deed of settlement, by appointing a general meeting in the month of April in this year, has afforded the directors, at this early period of the association, the opportunity of calling the proprietors together, to lay before them a statement of their affairs. In doing so, the directors have the satisfaction to inform the shareholders, that the affairs of the association are in a prosperous train. The produce of 1853 has been 3,439 tons, which, though falling short of their expectations, from the causes explained hereafter, yet exceeds by nearly 800 tons the produce of 1854; thus showing the continued increasing produce of the mines. Owing to a great measure to the excessive rains in the months of September and October last, without parallel even in a tropical climate, which suspended the workings during the time, and for a considerable period afterwards, a deficiency occurred in the monthly produce; but as, by the last reports, the mines were free from water, the workings will be renewed on their former scale, and the directors have no hesitation in stating their perfect conviction that the produce of this year will exceed that of the last. They fully expect that three steam-engines, which they have sent out, will be in full operation within four months from this time, two having arrived out prior to the last dates they have received from the mines; and as they would enable the manager at the mines to renew the workings of the lower levels, which had been suspended, in some measure, by the rains before alluded to, and which filled the mine to the surface, an increased produce, and, of richer ores, may be naturally expected. It is further to be noticed, that the operations have been limited to the mine No. 1 since the formation of the company. From Captain Reynolds's report it will be seen, that they far advanced in preparing to work other points, and chiefly the White Mine. The directors have further to state to the proprietors, that of the 12,000 shares announced to the public, a reservation of 1,000 shares was made by the old proprietors for special purposes. In August last, immediately subsequent to the formation of the company, negotiations were commenced with the proprietors of the Arrieta Mines, a property adjoining the company's mines, but a distinct and separate interest, by the offer to them of the said reserved shares, as the price of the consolidation of the two concerns; and the directors have the gratification of stating to the proprietors, that the adhesion this proposal has been given in by all the proprietors of the Arrieta Pertencencias, and that they now form part of the Royal Consolidated Cobre Mines, at no expense to the general body of proprietors.

Since the Royal Copper Mines of Cobre became the property of the association, the following ships have arrived with cargoes of ore:—

The Favourite, 241 tons 14 cwt.; Fieldfare, 177 tons 10 cwt.; Evander, 191 tons 4 cwt.; Cobre, 72 tons 14 cwt.; Star, 232 tons 8 cwt.; Rosehill, 207 tons 14 cwt.; John Hardy, 227 tons 6 cwt.; Tom Cringle, 270 tons 14 cwt.; Fieldfare, No. 2, 190 tons; Psyche, 272 tons 2 cwt.; Cabana, 265 tons 14 cwt.; Evander, No. 2, 175 tons; Cobre, No. 2, 225 tons 2 cwt.; Star, No. 2, 230 tons; Rosehill, No. 2, 191 tons 1 cwt.; Tom Cringle, No. 2, 297 tons 13 cwt.—Total 3439 tons.

And the following vessels have been dispatched for cargoes, and are at this time on their outward or homeward passages:—

The John Hardy, 227 tons; Cabana, 265 tons; Evander, 191 tons; Charles Clarke, 230 tons; Cobre, 225 tons; Star, 230 tons; Henry and Sarah, 150 tons; Rosehill 207 tons.

The directors also beg to submit to the proprietors the accompanying letters, recently received from the resident director, John Hardy, jun., Esq., and from Captain Reynolds, the mining agent. In conclusion, the directors confidently expect to be able to make a further dividend in the month of August next, being the earliest period, when, according to the deed of settlement, they are empowered so to do.

CHARLES P. GREENFELL, Chairman.

The following letters were then read to the meeting:—

Cobre Mines, February 25th, 1856.—I have the satisfaction of informing you that I resumed the management of the Cobre mines on the 6th instant. On reaching this favoured spot, I immediately proceeded to inspect the various workings, and I am happy to bear witness to the system of scientific combination, created by the talent and industry of Captain Reynolds. With respect to the present state and future prospects of the mines, generally, I beg to refer you to inclosure No. 1, and to vouch for its accuracy. Captain Ruxton is charged with the plan of the principal section of the property, and I shall lose no time in obtaining and forwarding similar sketches of the remaining sections.

From the weight and unwieldy nature of several portions of the engine sent from the Neath Abbey Works, and the necessity of constructing carts, different from those used in this country, for their transport hither, a considerable time will, I fear, elapse before it can be brought into operation; every exertion shall, meanwhile, be made; and no extraordinary expense should be spared, in order to secure its erection in time to stem the autumnal rains, as well as to stamp on the mine its character of unexampled richness. It appears that none of the assistant engineers have engaged to remain in the country, after the accomplishment of the simple duty of erecting the engine. I certainly understood, when at the Neath Abbey Works, that Mr. Tregelles took upon himself the obligation of furnishing two practical hands for the purpose of superintending this division of labour; should this impression prove incorrect, Captain Reynolds recommends that one or two engine-men should at once be sent from England; that they should be of temperate habits and approved character; and he urges that the preference should be given to men that may have established their good reputation in the service of some Cornish mine. An engine-man is to be procured at £1. per month, to be maintained at the expense of the company.

I am sorry at having to add, that there seems to exist a strong prejudice against the small patent engine, shipped by the John Hardy, on account of the leather pulleys, which, it is alleged, are apt to be worn away by friction, to the imminent danger of those below. I have, however, insisted on its immediate erection, and on its having a fair trial.

You will find, in a separate letter from Captain Reynolds, the most ample information respecting the mines, denominated in the names of Messrs. Hardy and Passenger, with the understanding at the time, that they were to form part of the general undertaking, and that they were to be worked by the capital, and for the benefit, of the association.

My attention, since my return, has been principally devoted to the means of reducing the extraordinary expenditure of the establishment in every branch. I am persuaded that the general maintenance of the white operatives has been conducted on a far more extravagant scale than could have been contemplated at the periods of their respective engagements; and that, added to a singular and newly-acquired character, as to the quality of the provisions with which they are supplied; the reckless conduct of the domestics appointed for attendance upon them, and want of system in the housekeeper's department; and the obligation that has been assumed by the establishment of washing their mass of clothing, have been productive of great expense and no less irregularity. I have commenced by suppressing the washing department, which will insure to the company a saving of 6000. per annum. I have taken measures, by the appointment of Mr. Cooke as receiver of stores under my immediate control, for a more judicious distribution of the daily supplies; and I have not only ordered off the grounds of the mine all animals, not the property of the company, but have made such contracts for the future supply of bread, beef, fowls, &c., as will insure a material saving. I have not omitted, at the same time, to endeavour to impress on the minds of all, that no enterprise, whatever may be its character, however ample its returns, or brilliant its prospects, is bound to bear any thing like prodigal expenditure, or to meet extravagant expectations. These measures may render me unpopular, and the subject of complaints to England, but I trust I shall be supported by you in these and every other salutary measure of reform I may consider myself called upon, in honour, to introduce for the benefit of the association.

Dr. Forbes, whose good qualities and merit I had frequent opportunities of appreciating on my passage out, has assumed his duties of medical attendant, and appears to have already acquired the confidence of all.

In virtue of the verbal power I received from you on taking leave, I have arranged with Captain Reynolds, whose period of service would expire next February, to remain on the establishment four entire years, to be computed from the 1st of January last, at a salary of 3000. per annum. He, Warren Trevellick, and Richard Webb, are anxious to be joined by their wives and children; and I should earnestly recommend the defrayal of their expenses out in the Tom Cringle, as by these means not only will their services be secured for an unlimited period by the ties of gratitude, but also by the heavy expense, always attendant upon any disposition to migrate.

Under a separate cover, you will observe that Mr. Clarke persisted in his determination of relinquishing the management of the affairs of the Cobre mines in St. Jago. Connected with this gentleman by long habits of intimacy, and fully appreciating the eminent services he has rendered the former and present proprietors, particularly during my protracted absence in Europe, I must own that I have received this communication with considerable regret. It only remains to me, as proceeding to town to-morrow, to adopt such measures as shall prevent any detriment accruing to the general interest by this act of resignation, and to make arrangements with some respectable

gentleman for conducting the affairs of the company, should Mr. Toulson consider himself incompetent, from continued indisposition, to the task.

JOHN HARDY, JUN.

His Majesty's Consul, and Managing Director.

February 22.—In stating to you the present state of these mines, I commence with No. 1. We have succeeded in clearing and repairing our lowest levels at this point, and recommenced driving the same. This level is as far east as the heave, the which heaved the lode four fathoms north. In our level from surface of Pit to Hardy's shaft, we are now driving north on heave, and expect to find the lode in the course of three weeks. In our higher level to the east of this heave our lode was very rich. It was from this point that we broke the stone-copper which gave forty-five per cent. We are sinking a winze from this level, about three fathoms east of heave, the which is three fathoms deep. The lode is very rich at the bottom of the same. We have, therefore, every reason to hope that we shall find the lode as rich in our bottom level as we did in the level above. Our produce for the first fifteen days of the present month has been little, by reason of our clearing and repairing the bottom level. We have for the last four days been raising nine tons per day, five of which comes from the back of bottom level. I hope we shall be able to continue the same throughout this month. The whole of our bottom level has gone through a rich and wide lode, but we cannot break any copper below the bottom of this level, until such time as Hardy's shaft shall be deep enough, so as to enable us to drive a level from the same below those already driven.

Our level from surface of pit is communicated with that of Hardy's shaft. This shaft is nine feet lower than bottom of level. In the time of the last heavy rains we were driven by water from the level, and from Hardy's shaft; but within the last week we have been enabled to recommence sinking this shaft. Every effort must be made in order to sink this shaft as deep as possible, while the dry weather shall continue, for it is my opinion that nothing but the application of steam will enable us to deepen this shaft, after the setting in of the next heavy rains. The produce of the next twelve months depends entirely on our success in deepening this shaft; when we shall have a level ten fathoms below the lowest we now have. There is every appearance of being enabled to give produce to a very large amount. We have again commenced the sinking of Clarke's shaft. This shaft is about five feet deeper than the bottom of level from surface of pit to Hardy's shaft. With respect to the white mine—at this point we expect to intersect the lodes within two months. We have communicated the shaft with the cross-course. This cross-course will cut the lodes ten fathoms deeper than any part of former workings. We shall at this mine be enabled to excavate the vein to the depth of this adit, without fear of being hindered by water.

W. REYNOLDS.

Arrieta Mines, Feb. 22.—At the Christina mine the lode is very rich. I should think that the average of the copper now raising there is worth thirty per cent. Three tons per day is raising from there at this moment. The shaft is ten fathoms three feet from surface. A cross-course is driving from the same towards the excavations made by us, and from which we were driven by the water coming so powerfully on us. This cross-course will intersect the vein six fathoms below the excavations made on the vein. The horse engine, now at work at this point, answers very well. The old excavations are now dry, by reason of the cross-course being at no great distance from the lode, and so much below it. In case this cross-cut meets the lode so rich as it now is in the bottom of the excavations made from bottom of our highest level, the engine-shaft must be again deepened, and another cross-course driven from bottom of shaft to lode, in order to drain the same. You are aware that no ores can be broke below the bottom of the level that will be driven on lode, to the depth of the cross-course now driving, until such time as the engine-shaft shall be deepened, and the lode intersected from bottom of shaft by a cross-course. I am rather doubtful if this can be done by the present engine now at work there. Our water at present is at least one hundred gallons per minute. Neither can the shaft be again sunk, without miners being in the shaft by day and by night. In case this mine was blended with the old (this is now accomplished, by the consolidation of the Old and New Pertencencias referred to in the report), a steam-engine, thirty-inch cylinder, should be fixed on this shaft, and galleries driven towards old mines, and from old mines towards those from Christina, so that the whole might be consolidated.

W. REYNOLDS.

ROYAL POLBEROU MINING COMPANY.

The general annual meeting of this company was held at the George and Vulture Tavern, Cornhill, on Saturday, the 30th April last.

W. R. VIGORS, Esq., in the chair.

The chairman read the advertisement calling the meeting, the statement of accounts, and the following

REPORT.

In stating the situation of the affairs of the company, the directors have to congratulate the shareholders on the result of the balance-sheet, which presents assets over and above all claims to the amount of 3,449. 19s. 8d.; whilst, at the same time, the high value of the mines are proved, and a short time is all that is required to reap the benefit of their produce.

Cash, ores, and other assets of the company, £5,243. 13 6

Debts, 1,833. 13 10

Leaving clear assets £3,449. 19 8

The directors cannot better call the attention of the shareholders to the improved state of their property than by pointing out the fact, that out of the cash received upon the first and second call on the 1,000 new shares issued pursuant to the resolution of the last meeting, the sum of 5,565. 11s. 10d. has been expended in paying debts and expenses due upon and incurred prior to the 31st of December last. In advertising to the monthly returns, attention is called to the striking increase which has taken place during the present year. In January they amounted to 940. 14s. 11d.; in February to 524. 19s. 1d.; in March, to 1,290. 8s. 4d.; in April, to 1,715. 16s. 6d.; and our rapidly advancing situation will be still more apparent, when it is stated that our sales for this present month would have been 2,000, at the least, had not our machinery stopped one whole week in this month, arising from the still defective state of the boiler of the stamps engine, which has been an unceasing drawback to our exertions. The new boiler is, however, completing on the mine with all dispatch. Our periodical reports have shown that we have forty-six heads at work at the steam stamps, and we have added new ones now in preparation, so that in the course of the year we shall have seventy heads of steam stamps. In addition to this, we have completed a new water wheel, which will be put to work next week with three heads; and to this three more will be shortly attached. With these, our returns cannot be less than from 3,000. to 4,000. a month; independent of that continued increase which a subsequent augmentation of the stamps will afford. Our merchants' accounts, so far as they fall upon the adventurers, are decreasing in every respect, and will be still less. Our engine-shaft is cut down to the bottom about thirty-nine fathoms below adit; the benefit of this we have already experienced by the splendid discovery on the Pit Lode, which has been stated in the periodical reports from the mines. With respect to this discovery, we have only to state that we sell the tin raised therefrom without stamping, merely breaking it down, and without burning, except for the purpose of easier breaking, there being no muddle in it. We are now driving west to cut this lode at a deeper level, which, when we have attained our object, will give us considerable produce of the value realised in the recent discovery. The specimen on the table from this lode which equals at least ten and a half in twenty in the stone as broken, will furnish some idea of the extraordinary value of this lode. Our thirty fathom ends at East Pit, on Trevenance lode, are looking very kindly in the west, and we have discovered a branch of tin about six inches wide, very good, which is improving both in size and quality. In clearing Crease's shaft we have cut a rich lode, promising large returns of tin. Our ten fathom level, east of East shaft, on the South House lode, is looking well; we shall raise great quantities of tin from above and below this level. We have also discovered a flat course in this end which is from three to four inches wide, very good. Our twenty fathom level, west of Alders, in the fair ground, has been driven through a great length of valuable tin ground, from which we are realising, and we have still here very valuable ground before us. From this part west, it is considered that the most valuable of our present workings is presented, looking at the thousands of fathoms of high ground before us on the different lodes. Our tributaries throughout the mine are working with good spirit, and since our recent discoveries are exceedingly anxious for takes. We have very recently and minutely investigated our underground proceedings throughout the mine, from which it is considered that we shall raise a far greater quantity of tin the succeeding months than we have hitherto done. In the course of the summer, our object will be to extend flat rods to old Puhaym, and we are as sanguine of ensuing upon rich tin ground as soon as the water is drawn from thence as we were, before we had fished the water in our present shaft, of cutting the lodes which have already been so abundantly productive. Indeed, it may be safely said that the riches of the mine, great as they are, are yet insignificant compared to the discoveries which are calculated upon in old Polberou shaft. It is impossible to take a review of this mine without advertising in the highest terms to the success of the adventure. It is only twenty months since the company put the mine to work; in that period our operations have been aided by upwards of 10,000. realised out of the mines, and we have 2,000. worth of ore on hand, making upwards of 12,000. produce. Our capital expended amounts to 21,000., of which 6,000. has been expended in engines, machinery, and stock now on the mine, being expenses not of early recurrence. The capabilities of the mine are developed, and it appears inexhaustible; its produce is of the highest value, and we may in-

crease our machinery so as to return at the least 50,000. per annum, and even beyond it; for there is no limit to the ore that can be raised.

STATEMENT OF THE SITUATION OF THE COMPANY.

April 30.	Dr.	Cr.	April 30.	Dr.	Cr.
To balance due to me	1300. 2 0		By value of tin ore	2000 0 0	
Shareholders	1300. 2 0		48 new shares unpaid	304 0 0	
Balance due to Mr. Alder	283 13 10		2nd instalment of 4s. per share on 452 new shares	1728 0 0	
Not yet paid	300 0 0		Balance in the hands of Messrs. Lubbock & Co.	571 13 6	
Balance	3449 19 8		Value of stock, iron tim-	600 0 0	
			ber, &c.		
				5283 13 6	4283 13 6

The report having been read, it was moved and seconded that it be received, which was agreed to.

It was then resolved, that "Mr. Daniel Alder, jun., the acting director on the mine, be paid a salary of 3000. per annum for his services, to commence from the period Mr. Carne ceased to be a director."

It was then moved and seconded, "that all new shares, upon which the call of 4s. per share be not paid on or before the 9th May ensuing, be forfeited; and the same number of new shares be issued; and that notice thereof be inserted in the daily papers."

Thanks being voted to the chairman, the meeting, which was numerously attended, adjourned.

MEXICAN COMPANY.

A general annual meeting of the proprietors of this association was held at their office in Great Winchester-street, on Thursday, the 5th inst.

JOHN MITCHELL, Esq., in the chair.

The secretary first read the advertisement convening the meeting, and then the following

REPORT.

The deed of constitution of the company requiring that a meeting of proprietors should be held on the first Thursday in May in each year, has rendered it imperative on the directors to convene the present meeting, for the purposes prescribed by the deed. But for this consideration, the directors would willingly have postponed the present meeting until they could have been better prepared to report on the measures likely to be adopted and carried into effect at the company's mines in Oaxaca, in consequence of the resolutions adopted by the proprietors at the special meeting, held on the 4th of November last, to grant further aid for the prosecution of the operations there, by sanctioning another call of 2s. per share, which the directors have now to report has been paid on all the shares then in existence, with the exception of five belonging to the estate of a deceased proprietor.

In consequence of the readiness and unanimity with which the resolutions for the sanction of this call were passed at the meeting above alluded to, the directors, anxious to give effect to the objects for which it was made, without waiting for the payment of any part of it, sent out by the very first opportunity which presented itself after the meeting (the November mail) a credit for 5,000., and have since sent out to the value of about 3,000. in quicksilver and other stores essential for the prosecution of the works, intending in the autumn to extend these supplies to about 1,000. more. The remainder of the call being required here for necessary disbursements connected with the undertaking. The short time which has elapsed since the last meeting, having barely sufficed to enable the directors to hear from their chief commissioner, that the credit sent out in November had been received by him, must necessarily preclude them from reporting much on the present occasion, as to the effect which these supplies are likely to produce at the mines. And, as the proprietors are aware, from the letters which have been unreservedly submitted to them from time to time, as they have been received, that the operations at the mines had been very much circumscribed for want of funds, until the decision of the proprietors could be made known, and the requisite supplies sent out, the directors content themselves on the present occasion with announcing, by way of appendix to this short report, extracts from the despatches lately received from their chief commissioner, dated 27th of February last. By these, it will be perceived, that having received from Mexico the proceeds of his first bill on the directors for 1,000. on account of the November credit, he was about to resume active operations at those mines which had been in a great measure suspended until these funds were placed at his disposal, more especially those of

SAN FRANCISCO, SAN ENRIQUE, and JESUS MARIA.

so particularly alluded to in the report presented to the proprietors in November last; and, as every letter since received from the commissioners has represented the opinion of Mr. Kurtz, the chief mining officer, as continuing to be as favourable as ever concerning these mines, the directors look forward to the future development of them with the same confidence as was expressed in their last report to the proprietors.

It will also be perceived from these despatches that the Parima mine, which the proprietors are aware, from many former reports, the directors always entertained a very favourable opinion of, from its well ascertained capability of yielding a very large quantity of ore at a very cheap cost of extraction, and of great facility in reduction, is likely, from the improvements lately introduced, as well into the method of working it, but still more into the reduction of its ore, to yield a fair profit to the proprietors. And as the directors have lately had the opportunity of obtaining some very valuable information connected with this improved method of reduction, they lost no time in imparting the same to their chief commissioner, and are preparing the necessary machinery (the cost of which will comparatively be very trifling) to be sent out to the mines, to give full effect to it, from which they anticipate the most favourable results.

In conformity with the provisions of the deed of constitution the directors now present the balance-sheet of the accounts of the company, from its commencement to the 31st of December last, examined and attested by the auditors, and have to report that John Mitchell, Esq., and John Oliver Hanson, Esq., two of the directors, and Thomas Starling Benson, Esq., one of the auditors, are in turn to go out of office by settled rotation; but being re-eligible, now offer themselves for re-election as directors and auditors.

By order of the Court of Directors. J. M. MAUDS, Secretary.

32, Great Winchester-street, London, 5th May, 1856.

RECEIPTS.

To amount received on shares	£303,426 10 0
Balance of the account on the 31st December, 1854	942 15 1
For interest on instalments this year, discount on prompt payments, dividends on stock, interest and profit on Exchange Bills	91 5 4
For fees received on transfers this year	106 0 0
	£305,566 10 5

DISBURSEMENTS.

By sundry payments on account of the commissioners in Mexico, to 31st December, 1854	£311,492 4 4
Ditto, in the year 1855	13,187 8 7
General charges—For salaries, law charges, rent and taxes, postage, stationary, printing, and advertisements, &c.	20,731 11 9
Ditto, in the year 1855	1,073 6 0
Fixtures and furniture in the office of the company	120 0 0
Advances made on account of a mint	1,558 12 3
Trustees' Indemnity Fund—For 2000. Each, 10s. 6d. per 17500. 2s. 11d. Three per Cent Consols, at 78	2,000 0 0
Exchange Bill Accounts—For cost of 70000. Each, 10s. 6d.	1,314 2 3
Cash on hand	7,140 8 0
Stamps in hand	30 10 0
	£363,568 10 6

APPENDIX TO THE REPORT.

Extract of a letter from Mr. Obicini (late chief commissioner to the company in Oaxaca) to the directors, dated 26th Jan. 1856.

"The following gold and silver has been sold since my last: Amongst the rest is enumerated a lump weighing 4 marks 14oz., sold to Governor and Co., at 77 4 per mark of silver, and 414 4 per ounce of gold, producing £245 6. I beg to give an explanation relative to the above 4 marks 14oz. silver, which contained 2,866 grains of gold per mark, and so to have the same has been obtained. I have for some time past had it in constant position, that the self gold assaying machine, as used in the Tyrol, and applied by the late Mr. Weichsel to the Parima Company in this country, could be employed to advantage at your stamping mill at Oaxaca, with Parima ore of the purest description."

"I accordingly made an experiment on this system with two iron pans which Mr. Sadler, the managing director of the Parima Company in Oaxaca, very kindly consented to lend me; and the result has been the production of the above lump, weighing 4 marks 14oz., from assay of 'Parima' ore, which was obtained without expense, except that of crushing the ore, and no, as all events a very insignificant, loss of quicksilver."

"To save trouble in describing this machine and process, I need only refer the Board to the descriptions given of it in the fifth number of the 'Mining Review,' for April 1851, and from what I have seen and heard from 'Parima'

as also from the little experience I have had of it here, I can assure the Board of the correctness of such statement. I take it for granted, therefore, that with ores from Purisima, taken from the upper workings, although containing less than an ounce of silver per quintal of ore, but owing to their rich ley of gold, each machinery, say ten or fifteen pans, attached to the stamping-mill, and so arranged that the pans can discharge their refuse on to good and well-arranged concentrating tables, or 'planillas' (such as have been lately introduced into this hacienda with decided advantage), would produce very brilliant results. Matters in this case could be so arranged, that the transporting of the ores from the mine to the hacienda, would cost less than a 'medio' (half a real, or about 3d. sterling) per carga."

In a letter from Mr. Turnbull, who has since succeeded Mr. Obicini as chief commissioner to the company in Oaxaca (his period of engagement having expired on the 18th of February last), Mr. Turnbull added, under date the 26th Jan.—

"I perfectly agree with Mr. Obicini in opinion, that great advantages may be derived from extracting the gold and polvillo, and concentrating the silver ores of a poor description from 'Purisima,' by means of the pans and 'planillas' annexed to the wet stamping mill at Socorro, and shall certainly devote my especial attention to it, as it may be done on a large scale with very little expense."

In a subsequent letter from Mr. Turnbull, dated the 5th February (received together with another, dated 27th February, in copy, via New York, on the 26th ult.), he writes as follows, on the same subject, as also with reference to the 'Purisima' mine generally:—

"I certainly am of opinion that this so long despised mine may, in a short time, prove itself the best of the whole—especially if we should be fortunate enough to procure a first-rate 'azoguero' (amalgamator). I do not think that we ought to gain less than one and a half to two dollars per carga, if the ore be pererated (assorted) so as to reach the ley of two ounces per quintal on the average. I confidently hope that a clever azoguero, with the aid of arrastres, will get five and a half ounces out of every six ounces of silver contained in the ore; so that by taking the mining charges (or cost of procuring the ores) at \$1 4 per carga, which they ought not to exceed if abundant, and the reduction charges at \$2 (which, for these ores, is not too little), together \$3 4, if we should obtain from them \$5 4, would leave a profit of \$2 per carga, besides their ley of gold. At present, with our very imperfect mode of reduction by patio, and the cost of production being \$2 per carga, we only just cover our expenses with ores of that ley, and the gold remains clear to us."

"We shall, moreover, have the advantage of being able to obtain the gold out of the poor ores, and even from the 'desectos' (rejected ores) by means of the pans attached to the wet stamp-mill, and at the same time concentrate them, for barrel amalgamation, by means of the 'planillas,' also attached to the stamp-mill. I mean to devote my best attention to this subject, as many of the Purisima ores, containing only one ounce of silver per quintal of ore, are as rich, or even richer in gold than the ores of Penoles, which they reduce to a profit; and I am persuaded, that in the wet stamp-mill they may be crushed, the gold extracted, and the ores concentrated to about five or six ounces, at a cost of less than one and a half reals per quintal."

In Mr. Turnbull's last letter on this subject, dated 27th February, he writes as follows:—

"Mr. Sadler, of the Penoles Company, having kindly promised to favour me with the loan of half-a-dozen more gold pans, I have ordered a 'planilla' to be attached to the wet stamping-mill at Socorro, by means of which, when completed, I am confident that a trial on a large scale—say of 1,000 quintals of Purisima ores of a ley of from three-fourths of an ounce to one ounce per quintal, with a good ley of gold—will turn out so well, that the gold extracted will pay all the cost of the ore and of the crushing; and, by means of the planillas, we shall be able to concentrate these ores (which otherwise would not bear the expense of reduction) to a ley of five or six ounces, which may be advantageously reduced in barrels."

"The 'planilla' is an inclined plane, over which the muddy water from the stamp-mill will flow; and being covered with coarse cloths, the water deposits on these the flowers of the ore (or 'polvillo'), carrying off all the earthy matter. When completed I shall report further respecting it. The cost will be about \$200."

Mr. Turnbull, in other parts of his letters, draws the attention of the directors to regulations which he has adopted, and means rigidly to enforce with respect to the better working of the mines, by compelling the miners ("barreteros") to commence working early on Mondays, and continue late until Saturdays; by which he calculates on a material increase in the production of ores, especially from 'Purisima.' The effect had already become apparent—the production from that mine having increased full one-third during the week immediately preceding the date of his letter, during which the regulation had been in force."

He had also particularly and urgently impressed on Mr. Kurtz, the chief mining officer, the necessity and propriety of conforming to the wishes and instructions of the Board of Directors, as to a higher pereration (or assortment) of the ores at the mines, by means of which, he adds, "I confidently expect, that by keeping these orders in force, we shall shortly bring down the cost of the Purisima ores to \$1 1/2 per carga, and raise their ley to 2 1/2 oz. per quintal, when this mine would leave a very fair profit."

He concludes his report, under the head of "Mines," as follows:—

"The aspect of these is, I am happy to say, improving: there is now no doubt that the vein of Soledad has been cut by the new shaft of Santa Cruz, and improves daily. Should we get on good ores, we may shortly expect to meet with the same in the adit 'Poder de Dios,' and have a fine field before us. The ores of Purisima, also, improve weekly; and we have great hopes that this long neglected mine, in conjunction with Soledad, may shortly do something towards redeeming our hitherto heavy losses. Appearances are also favourable in Rosario (de la Cumbre), and we by no means give up our favourable hopes from the San Francisco lode. I trust, ere long, that my communications will not be confined to hopes, but that I shall be enabled to give you more positive and more favourable information. Both the Rosario (south) and the San Antonio mines have been returned to their owners."

"I have lately contracted for a new mine connected with the Purisima and Soledad lode, on such terms as cannot entail any loss on the company, being merely the payment of an annual rent of \$20, and a gratuity of \$100, if we continue to work it beyond August next. Any future remuneration to be dependent on profits, and to be entirely at the discretion of the Directors. It is named San Francisco de Paula. We began working it this week, and the assays of the ore already obtained from it are pretty fair—2 1/2 ounces; and from the width of the lode, I hope this mine will yield us cheap ores of a fair ley. I was the more readily induced to lend my aid to the working of it from its capability to yield, besides its picked ore, a great abundance of ores of about one ounce per quintal, with a good ley of gold in them, at a cost of two or three reals only per carga—which, if the trials with the pans and planillas at Socorro should succeed, would leave us an excellent profit. Being in all respects similar to the Purisima ores, and very advantageously situated as to locality—especially to the haciendas de Cinco Señores and San José, which, as you seem disposed to continue to rent them, I have renewed the contract, for such time as the company shall choose to retain them for \$300 a year rental—which is very moderate; in fact, it would be worth all the money in order to keep them away from us; but independent of this the stamp work at San José is good, and may save us the expense of putting up a new wheel in this hacienda (yavesia) to the lower stamp-work—which, as soon as the arrastre are completed, would be useless."

"I am also in treaty for the purchase of the Polvillo at San Pedro Nolasco, on favourable terms, and am only waiting the result of some trials by barrels now going on at Santa Ana, to decide on the purchase of perhaps a large quantity of them. I also propose, with a view of reducing our general expenses as much as possible, in conformity with the particular and positive instructions of the directors to that effect, to discontinue the renting of the Via Farm at the end of this year, until which period I am bound by the present contract; but can in the meanwhile make it serviceable as pasturage for our lean cattle. I intend also to dispose of most of our transport establishment mules and asses, retaining only a few of the best for the conveyance of our stores and money to and from Oaxaca, and contracting with the Indians (which I can readily do) for the transport of our ores from the mine to the haciendas on better terms than we have hitherto been in the habit of charging to the mines for the same purposes, to cover the expense of the transport establishment. It is also my intention to disengage, for the future, with Dr. Sander's services, and the medical department, at Wilhelm, the assistant surgeon, is quite competent to manage cases of accidents and slight illnesses, and it will be cheaper to have medical assistance from Oaxaca, in case of any thing serious requiring it, than to keep up the heavy salary of a doctor, besides a medical establishment."

"I shall now proceed to the most important subject of all, viz. the state of our finances, and in acknowledging the receipt of your letter of credit for ten thousand pounds. I must bid, that I greatly regret it was not for double that amount. You can have no conception of the injury done to the "negotiation" (undertaking) by your remitting in small credits, instead of at once placing at the disposal of your commissioner a good round sum, which would enable him at once to undertake all that he deems essential for the promotion of the welfare of the concern. For instance, from the arrastres having been erected at Santa Ana, more of the credit destined for them was expended on a "patio" and "lavadero" at that hacienda, than on the arrastres themselves; consequently, the whole of that credit was expended by the time we had finished the erection of three arrastres. There being now four there, they will suffice for the present patio room; but I should have wished particularly to have erected three or four more at that hacienda, and increase also the patio room, which might now be done at a trifling expense, and to have erected at least half-a-dozen arrastres at this hacienda (yavesia), especially now that the lower stamp mill is stopped, in consequence of a new water wheel being necessary, the cost of which will be equal to that of a new ar-

restre; and the six I contemplate erecting here, would be fully adequate to the working power of both the stamp mills. But how can I do this with a credit of such very limited amount? I calculate that the cost of all these improvements would amount to \$6,000—of itself, one-fourth of the credit—and though they will be probably be most wanted, when there will be the least possibility of our doing so, from our credit being exhausted, I am deterred from doing what I conceive to be absolutely indispensable, from a dread of not having sufficient means left to promote the working of the mines."

"This has been the reason why many things have not been undertaken, the importance of which have been great beyond measure; and thus we have gone on, from year to year, eating up our credits, one after the other, with continual bad results, and always remaining in the same bad position."

"If, at the meeting of the proprietors in November, they had determined, at once, to destine a certain defined amount to be expended on this undertaking, and in the event of the application of that sum failing to place the negotiation in a profitable position, then to abandon it, and have had sufficient confidence in their chief commissioner, at once to have placed this amount at his disposal, I could have undertaken, with spirit and with confidence, such operations as I deem necessary for the good of the concern; and, depend upon it, the result would have been much more favourable."

"Be this as it may, from the thorough conviction I am under of the necessity for our erecting more arrastres, and of the injury occurring by deferring, from year to year, the improvements which, if done at once, would entirely change the aspect of our affairs here, before the bad results occasioned by delay eat up all our resources, I shall at once order the erection of the six arrastres, which I have before stated to be necessary for this hacienda, which will supersede at least one of our stamping-mills, and do the same work as both of them, at a much cheaper rate, and infinitely better; and if the Purisima mine goes on, as there is every prospect that it will, and I should be fortunate enough in procuring a good azoguero, I should entertain no doubt of seeing this mine wrought to a fair profit. At the same time, we are all looking forward, with the greatest anxiety, to the development of the other mines, especially those on the San Francisco lode, by means of the trial works which are now going forward in them; and I confidently hope that some of them will turn out well."

It was then moved and seconded that the report now read be received, adopted, and together with the balance-sheet now presented, be entered on the minutes of general courts for the inspection of the proprietors. Carried unanimously.

The report was not ordered to be printed, the meeting very properly considering that its publication in the *Mining Journal* was sufficient for all purposes.

Thanks having been cordially given to the chairman and directors for the great attention which they continue gratuitously to devote to the interests of the company, the meeting adjourned.

ALBION MINING COMPANY.

A meeting of the proprietors in this company was held at the office of the company on Thursday, the 5th inst.

T. ASHTON, jun. Esq., in the chair.

The advertisement convening the meeting having been read, the chairman addressed a few prefatory observations, when a report from the mining captains was also read, with a short statement of the accounts of the company.

The chairman expressed, on the part of himself and the board of directors, their regret that the undertaking had not as yet been attended with the beneficial results which had been contemplated on the formation of the company, and which thus rendered it necessary to make a further call for the purpose of prosecuting the working of the mines with that energy which their importance demanded, not doubting but, by a prudent application of the funds to be placed at the disposal of the directors, that they should be enabled to make returns to the proprietors, and justify the expectations they had entertained as to the value of the property. It was therefore proposed to make a further call of 10s. per share, which was found to be necessary to effect the object which the directors had in view.

The question having been submitted to and approved by the meeting, a call for that amount was accordingly determined upon.

In the course of the proceedings, a proprietor having risen for the purpose of making some observations on the salaries of the directors, which, it will be remembered, was 150*l.* each per annum.

Mr. Mocatta stated that the directors had, for some months' past, reduced the salary from 150*l.* to 100*l.* a year each—which statement evidently gave great satisfaction to the proprietors assembled. We heard it whispered in the room that the *Mining Journal* had some influence in the reduction thus made—but we should rather ascribe the reduction to the good sense and proper feeling of the gentlemen in the direction, who must have felt that 150*l.* per annum for each director was more than an equivalent for the services rendered.

Thanks having been voted to the chairman and directors, the meeting separated. The following report on the mines was read.

REPORT.

Agreeably to your request, we have this day attended and made an inspection of Wheel Liberty and Mithian mines, and give you our report as follows:—First, we found Wheel Liberty engine-shaft sinking below the sixty fathom level by eight men, at 30*s.* per fathom, and is now down about ten feet below this level. The lode in the shaft is two feet wide, producing good stones of ore. There has been a great deal of ground opened on the different lodes in this part of the mine, and although at places the lodes had a very flattering appearance, they have not been found to produce but little ore.

The following are the levels which are at present driving:—First, the sixty fathom level has been extended west on the main lode fifteen fathoms, and is now driving by four men at 3*l.* per fathom; lode five feet wide, chiefly spar, with a little mundie, and spots of ore; this level has also been extended east about eighteen fathoms; lode in the end about three feet wide, composed chiefly of spar, and a small quantity of mundie and ore, and is now driving by four men at 3*l.* per fathom.

The forty-seven fathom level has also been extended west of the engine-shaft, from seventy to eighty fathoms in length. The lode at places has produced a little ore, and is now driving by two men at 3*l.* 10*s.* per fathom, and at present will produce about a half ton of ore per fathom.

The forty-seven fathom level is also extended east on this lode about fifty fathoms; lode in the end two and a half feet wide, composed chiefly of spar, and is now driving by two men at 6*l.* 10*s.* per fathom.

The forty fathom levels have also been extended considerably, and these levels are now driving, but they led to but little discovery; however, there has been a forty-seven fathom level extended east on a north lode about fifteen fathoms, and is now driving by four men at 3*l.* 10*s.* per fathom; lode in the end about eighteen inches wide, and will produce about one and a half tons of ore per fathom, and the lode has a favourable appearance. It is expected this lode is cut at the sixty fathom level, but if so it does not present so favourable an appearance as in the level already described. There is also a great deal of ground opened on the counter lode, at the sixty, forty-seven, and forty fathom levels; the forty-seven fathom level has been extended to the greatest distance, and the lode in the end has a very favourable appearance, and is producing some ore.

At Wheel Mithian, the only thing doing on the main lode is sinking the engine-shaft under the fifty-four fathom level; lode in the shaft very large, composed chiefly of mundie, and the ground has not a very favourable appearance, neither has it in the levels over.

There has also been a shaft sunk ten fathoms below the adit level on the south lode, and about thirty fathoms opened on the lode. The western end is now driving at 3*l.* 10*s.* per fathom, composed of mundie; the east end is driving also, but the lode is in a disordered state.

From the foregoing you will perceive that the prospects of these mines are but poor at present, yet from the appearance of the lode in the forty-seven fathom level, east on the counter lode, and also from the appearance of the north lode at the forty-seven fathom level, and the alterations that do appear to be taking place in the ground about the main lode at the sixty fathom level, we do recommend you to sink the engine-shaft with as much expedition as possible, and see what the lode will do at deeper levels, as we are of an opinion, in taking the number of lodes this sets do contain, and the shallow depth it has heretofore been worked to, it may still make a permanent and profitable undertaking.

At Wheel Mithian, we are of opinion if there is any good to be done it will be eastward, under the slide, so we would recommend you to sink your shaft at present, and wait for extending your levels until the engine do work at the adjoining mine.

There is one remark we will make in conclusion, that is, employment being very brisk in this neighbourhood, there are not tributaries to be found to work the ground which is laid open, as they would do at times past, consequently it will make much against every mine that cannot meet the cost respecting the machinery on the mine, that is, engine pitwork. We have found them in very good order, although the great quantity of water, and the nature of the lode being spar at Wheel Liberty, must make it very expensive for leather, coals, &c.

JOHN RICHARDS, WILLIAM SINCOCK,
JOHN MIDDLETON, WILLIAM PETERS.

We cannot close this report without giving the agents much credit for their able conduct for conducting and general management of the mines.

JOHN RICHARDS, WILLIAM SINCOCK.

STATEMENT OF ASSETS AND LIABILITIES, MAY 5, 1835.

ASSETS.		£	s.	d.
Balance at the bankers		£1863	17	11
Bills receivable, due May 17		£30	5	0
Ditto, due May 24		10	11	11
Produce of 62 tons of ore, sold April 21, receivable June 23		49	16	11
		£1633	14	10
LIABILITIES.		£	s.	d.
April cost, calculated at		£450	0	0
Bills accepted, due in May and June		376	9	4
Merchants' bills not yet drawn for		316	8	8
Ditto for April, estimated at		150	0	0
		£1293	18	0

ST. JOHN D'EL REY MINING COMPANY.

The sixth annual meeting of the proprietors of this association was held at the office of the company, on Thursday, the 5th inst.

J. D. POWLES, Esq., in the chair.

The meeting was respectfully attended, and the report of the directors gave general satisfaction.

The report having been read, it was resolved that it be printed and distributed.

Robert Addison, Esq. and John Routh, Esq., were re-elected directors. Sir Richard Dobson and A. Loughnan, Esq. jun., were re-elected auditors.

The thanks of the proprietors having been voted to the chairman and directors, the meeting adjourned.

The following is the report submitted to the meeting, to which we have appended the accounts.

REPORT.

In their last annual report the directors informed the proprietors that possession had been taken of the Morro Velho property, and the working thereof commenced for account of the company. The mining operations have been since uninterruptedly carried on by sinking and driving on the principal lodes. At the time of taking possession of this property, the company laboured under considerable disadvantages, in consequence of the dead works (always necessary to be carried on, for the purpose of opening out future means of supply) not having been adequately prosecuted by the former proprietors. Since the company has obtained possession, this important object has been followed up, and the working conducted on a regular and systematic principle, as fast as force has been obtained for the purpose.

The following is a statement of the produce obtained from the commencement of working the Morro Velho mines, per account of the company, viz.:

	ozs.	grs.		ozs.	grs.
December, 1834	2073	27	July 1835	2394	34
January, 1835	2158	56	August	1995	48
February	1670	49	September	1892	43
March	2522	46	October	1915	37
April	2427	09	November	1878	39
May	2268	09	December	2223	2
June	2028	64			
					27,450 19

This gold has been sold on an average at 2300 reis per oitava. The oitava is the one-eighth part of an ounce. Reckoning the mirei at 40*d.* sterling, this produce has been equal to about 10,522*l.* sterling.

The directors have not received the complete series of the accounts to a later period than the end of June last, owing to the illness of the accountant. From those which have arrived, it appears that the current expenditure of the establishment, from November 1834 to June 1835, inclusive, and including the cost of supplies sent from England during the preceding six months, was 38,489 mireis. The produce during the aforesaid period was 15,150 oitavas, from which deducting duty to the Government, ten per cent, 1515 oitavas, leaves net 13,635, producing at 2300 reis per oitava, 31,360 mireis. It appears, therefore, that during this period the mine has sustained its own current expenditure, and the extraordinary expenditure arising from the necessity of pushing forward dead works, within 7129 mireis, equal in sterling to 1188*l.* In stating the current expenses in the foregoing statement, the cost of the negroes, and the expense of taking charge of the property, are not included, as neither of them belong to the current charges of working.

Independently of pushing forward the dead works, the superintendent has had a great deal to do, in the mechanical department, in repairing and putting up stamps for stamping the ore, and many other surface-works essentially necessary.

From what has been stated, it will be seen that the monthly expenditure averages about 5500 mireis, which would be covered by a monthly produce of about 2460 oitavas of gold, and that consequently all above that amount of produce, assuming the average value of the gold to be the same as it has been during the past year, would be profit. Mr. Herring, in a letter dated the 23rd December last, states, that with twenty-four stamp-heads he was getting from seventy to eighty oitavas of gold per day, exclusive of an average daily produce of eighteen oitavas from the tank. He states that the probable daily produce, including the tank, would soon be about 100 oitavas. He adds, "It will be observed that this produce is supplied almost solely from the Bahu, there being no stopping in the Bahu end west, alias Quabra Panella lode. When this lode is laid open, it will give room for at least as many stopers as the Bahu, but the driving proceeds extremely slow." It will be observed, that this mine has been opened out at present to but a small extent. All accounts concur in stating that there is scarcely any limit to the extent of the mineral deposit. But time is of course necessary for opening out the lodes, and for providing increased machinery for stamping the ores. A full detail of the state of the several works will be found in the mining reports for the three last months of the past year, which are contained in the appendix.

Mr. F. C. Hocheder, to whose engagement reference was made in the last report, arrived at Morro Velho in the month of last August, and preparations were immediately commenced for applying the amalgamation process to the ores. In the appendix will be found his reports of his progress down to the last advice. What Mr. Hocheder has done hitherto can only be considered as experimental, but it is certain that a very large portion of the precious metal contained in these ores has hitherto been unextracted.

Mr. John Charles Hocheder, brother to the before-mentioned gentleman, who arrived in this country in the latter part of last year, brought with him some of the remains of the Morro Velho ore, after it had been stamped and washed. These samples Mr. Hocheder, on his arrival in the Tyrol, had the kindness to cause to be accurately assayed, and the following is his report thereof:—

"I mentioned to you when last in London, that I had brought with me a parcel of Morro Velho 'schliche' (remains), which Mr. Herring and myself extracted from the refuse at large, and which we had repeatedly washed in order to extract any particle of gold practicable by the bates, or, in fact, by any mechanical separation, and to ascertain by any subsequent analysis whether any gold could be detected in this (I might call) super refuse of the schliche, which would be attributable to the pyrites only, either arising from a chemical combination of the gold with the former, or the gold being mechanically, but extremely minutely disseminated in the pyrites."

"These schliche I have now here examined, and my expectations have been so greatly excited, that I doubted the correctness of my first result, and requested the imperial assay-master of this establishment to make another assay, from which I saw with pleasure, that he obtained a similar result, viz., 100 cwt, contains fifteen loth (Austrian weight) of fine gold (twenty-four carat), when reducing this into English weight, the result stands thus:—One ton of super refuse contains 1 ⁵/₁₆ ounces Troy of fine gold, or 1 ⁵/₁₆ ounces gold of English standard, and calculating it to the fineness of the Morro Velho gold (nineteen carat), the contents of the ton will be nearly two ounces Troy."

"I do not remember the contents of free gold per ton in the Morro Velho ores, i. e. which is obtained by the process of washing; but it would appear that the gold in the schliche of the refuse is so much more than that extracted by the canas, that it would be highly interesting to give every attention to the future reduction and treatment of these refuse; and that these schliche, which hitherto go into the river and are lost, to be immediately collected."

"Our Tyrolean amalgamators will be unavailing for the reduction of these refuse schliche, as they can only extract the free gold when applied at the stamps. The introduction of Mr. Herring's suggested arrastres will unquestionably be preferable, if the process of smelting should not be found the most effectual contrivance."

J. C. HOCHEDER.

The directors have not failed to urge upon the superintendent the taking the most effectual means for increasing the relative produce of gold.

Mr. J. C. Hocheder has kindly communicated useful instructions on the same subject from the Tyrol; and the directors captain sanguine hopes that the establishment of this gentleman in the superintendence of another company in the same neighbourhood will be of great advantage to the St. John d'el Rey Company.

It has been a source of considerable surprise to the directors, to find that so considerable a portion as an ounce and a half of fine gold per ton should be found in the remains of the ores, as it does not appear that any thing like that produce is at present obtained from the ores. In the months of September, October, November, and December, 1776 tons of ore were stamped, which did not yield, on an average, more than 4 oits. 33 grs. per ton; not quite five-eighths of an ounce.

By the balance-sheet of last year, the cost of the Morro Velho estate stood at 56,434l. 18s. 7d. In the present sheet it stands at 56,304l. 1s. 4d., being an increase of 11,669l. 8s. 10d. This increase consists chiefly in the purchase of negroes.

Mr. Herring having represented to the directors the absolute necessity of increasing the manual force of the establishment, in order effectively to carry on the several works, the directors have not failed to supply him with the necessary funds for that purpose. Up to the last advice, Mr. Herring had purchased eighty-five negroes since he had taken possession of the property; and he has been authorized still further to increase this number. The whole number of negroes on the estate at the last advice was as follows:—males 191, females 49, children 20; in all 260. The value of these negroes is, it is believed, full 20,000l. The directors are happy to state that every possible care is taken of the comfort of the negroes, both as to their moral discipline and otherwise.

Annexed hereto will be found the annual statement of the receipts and disbursements, and the balance-sheet to the 31st March last. By the latter document, it will be seen that the company's capital, at that date, was 59,291l. 11s. 8d.; and that a balance was standing at the credit of profit and loss account of 292l. 9s. 9d. These sums are represented by

The cost of Morro Velho estate and disbursements thereon	£58,304 1 8
The deposit fund in Brazil	17,100 0 0
Exchequer Bills	2,047 11 3
Balance at bankers, less acceptances to be paid	1,735 5 4
Balance with Mr. Harrison	1,677 3 8

Less, due proprietors of forfeited shares, sold..... 90,864 1 8
794 16 8

£90,069 5 0

This capital will be further increased by 2382l. 10s., being the unpaid portion, at that date, of the recently made call of 10s. per share.

The deposit fund in Brazil, consisting of 150,000 milreis of the stock called apolices, stands in the balance-sheet, estimated at the same rate as last year, viz. 1500 apolices, at 72 per cent, is 108,000 milreis. Exchange 38d. per milreis is 17,100l.; but by the last advice this stock was 87 per cent, and the exchange 40d. The dividends on this stock, at 6 per cent, per annum, are regularly received half-yearly by the company's agents in Rio Janeiro.

The following is a statement of the Company's finances, this day, May the 5th, 1836:—

ASSETS.		
Balance at bankers	£3619 0 0	
Exchequer Bills	2000 0 0	
Instalment due on 355 shares	177 10 0	
Cash in Brazil, about	1677 0 0	
	£4743 10 0	

TO PAY.

Messrs. Harrison's drafts	100 0 0
Due to proprietors of forfeited shares	638 0 0
	738 0 0

Balance in hand, available to the purpose of the mines 6735 10 0

PENOLDS GOLD MINING ASSOCIATION.

A half-yearly general meeting of the proprietors was held at the North and South American Coffee-house, on Monday, the 2d inst.

HENRY ENGLISH, Esq., in the chair.

The chairman, in addressing the meeting, stated that he felt it more important to direct their attention to the accounts, and the financial state of the affairs of the company, than to any prolix report which might have been submitted, and accordingly read to the meeting a statement of the receipts and expenditure, from which it appeared that on the additional capital of 15,300l., 4580l. had been called for—that of such sum shares were in arrears to the amount of 276l. 10s.—that the directors had made a trifling advance rather than make another call, until the proprietors should have met and their opinions taken, after an exposition of the affairs of the company—that during the past eighteen months about 1500l. worth of gold had been raised, and the produce applied to the working of the mines; and that although the directors were in advance in London, the remittances made to Oaxaca would have an available balance in the hands of the agents.

The chairman having read the accounts referred to, a conversation took place between several of the proprietors on the measures to be adopted; when, after a trifling discussion, it was resolved upon that such shares as remained in default on or after the 14th inst. should be absolutely forfeited, and that the directors should be empowered to make a further call at such time and in such manner as they should deem fit. The explanations of the chairman seemed to give satisfaction; and after a vote of thanks to that gentleman, the meeting adjourned.

The following is an abstract of the accounts submitted to the meeting:—

RECEIPTS.	£ s. d.	EXPENDITURE.	£ s. d.
First instalment on 3060 shares, at 1l. per share	3060 0 0	Remittances to the agents at Penolds	3754 14 11
Second instalment on 2507 shares, at 10s. per share	1253 10 0	Return of loan advanced in 1833	265 12 0
Cash advanced by the directors	208 11 10	Stores	148 0 5
		Deed of settlement, including prospectuses, &c.	44 0 0
		Advertisements and postage	48 9 6
		Salaries and office expenses, and incidental charges	261 5 0
	£4522 1 10		£4522 1 10

ANGLO-MEXICAN MINT.

The annual general meeting of the proprietors of this company was held at the office, 9, New Broad-street, on Tuesday, the 3d inst.

JOHN SCHNEIDER, Esq., in the chair.

We purposed giving the proceedings at the meeting, with an abstract of the report, but the directors feeling, and perhaps very properly so, that their affairs ought not to be made public, and as the proprietors seemed well satisfied on receiving their dividend, which was declared at the meeting, we feel that it would not be doing right to furnish a statement which is open at the offices of the company to all proprietors, and a copy of which we obtained, but under circumstances which we do not consider such as to warrant us in giving it insertion. We have only to observe, that if secrecy be necessary, the confidence reposed in the directors should be of that nature that they should not be called upon to furnish information to a meeting, which must in one way or other become of public notoriety.

MEXICAN AND SOUTH AMERICAN COMPANY.

A meeting of the proprietors of this company was held at the office, 9, New Broad-street, on Wednesday, the 11th inst.

As we were not allowed to be present, we venture to extract the following paragraph from the *Mining Review*, a work which, we need hardly observe, in matters of this kind, must be considered as of unquestionable authority.

"The objects of this company, which, however, are not brought to maturity, were—The entering into contracts with the mine proprietors to supply them with advances of money and stores, on the principal of what is termed in Mexico 'Avio de Plata.' By these engagements the contractors anticipate to the mine owners, from time to time, the forthcoming produce of their mines, receiving in consideration thereof the gold and silver produced thereby, at certain fixed rates, so regulated as to yield a handsome return for the money advanced. An interest of 14 to 20 per cent. per month is not an unusual remuneration for the use of capital in Mexico. On the other hand, it is not to be assumed that engagements of the nature contemplated, are wholly free from the contingencies of mining.

—The dealing in bullion, and generally in metals, and stores for mining purposes, are also contemplated. The principal features in the prospectus are, that the three directors, with power to add two to their number, shall receive one-tenth of the net profits instead of a fixed salary; that a dividend, at the rate of 6 per cent. per annum, shall be at once fixed, and that a reserve fund shall be formed, being 10 per cent. of the amount of dividends paid, with which the directors shall have authority to purchase shares should they fall below par. We do not exactly comprehend this: it, however, has the charm of novelty. Shares paying 6 per cent. per annum should at least be worth the capital subscribed; but we have seen a prospectus where the projector undertook to pay 15 per cent. per annum, for three years certain, but did not say any thing of capital or interest beyond that period. Another company once paid a dividend, wherein the capital, and not the profits, supplied the means."

GEOLOGICAL SOCIETY OF LONDON.

ADDRESS OF THE PRESIDENT AT THE ANNIVERSARY MEETING.

(Continued from No. 35.)

Few communications have excited more interest in the Society than the letters on South America, addressed by Mr. Charles Darwin to Professor Henslow. Mr. Darwin has devoted four years, from 1832 to 1835 inclusive, to the investigation of the natural history and geology of South America. From the position of the tertiary deposits which exist on both sides of the southern Andes, he concludes that the primary chain must have had a great elevation anterior to the tertiary period. A transverse section from Rio Santa Cruz to the base of the Cordilleras, and another on the Rio Negro, exhibit the structure of what Mr. Darwin calls the great southern tertiary formations of Patagonia, which may be separated into groups of distinct periods analogous to those already established in Europe. The lowest group is of great extent and thickness, and in one instance was observed to alternate with a bed of ancient lava, which seemed to mark the commencement of the eruptions from the craters of the principal chain of the Andes. Among the shells and corals, even of this lowest deposit, are some which are supposed to belong to species now living in the neighbouring Pacific. Over-lying this is a stratum of rolled porphyry pebbles, which the author traced for 700 miles. Scattered over the whole, and at various heights above the sea, from 1,300 feet downwards, are recent shells of *Altilia* species of the neighbouring coast, so that every part of the surface seems once to have been a shore, and Mr. Darwin supposes that an upheaval to the amount of 1,300 feet has been owing to a succession of small elevations, like those experienced in modern times in Chili.

The principal section described is one transverse to the Andes, extending from Valparaiso to Mendoza. The Cordillera consists here of two separate and parallel chains, the western being composed of stratified sedimentary rocks resting on granite. The strata are violently dislocated and contorted along parallel north and south lines, and become crystalline as they approach the granite. Some of the slates and limestones, probably referable to the transition period, contain organic remains at an elevation of 13,000 feet above the sea. In the eastern chain are sandstones and conglomerates, and associated felspathic rocks regularly bedded, and more recent than the rocks of the western chain, being partly made up of their debris. After much investigation, Mr. Darwin convinced himself that these were of the same age with certain tertiary deposits of Patagonia, Chiloé, and Concepcion, resembling them in mineral character, and in the ligate and fossil wood which they contain. In one escarpment is seen a sandstone of this system in which there is a wood of petrified tree, in a vertical position, some of the trees being perfectly silicified and of dicotyledonous wood, others consisting of snow-white columns of coarsely crystallized carbonate of lime. They appear to have formed a clump of trees which had grown on lava and was then submerged, so that layers of fine sandstone were quietly deposited between the trunks. The enveloping sandstone rests on lava, and is again covered by a bed of black andesitic lava about 1,000 feet thick. Over this there are at least five other grand alterations of similar rocks and aqueous deposits, amounting in thickness to several thousand feet. The same sedimentary strata, or the continuation of them, are not only altered by granite, but are traversed by dikes of granite proceeding from the mass, and also by numerous metallic veins of iron, copper, arsenic, silver, and gold, all of which can be traced to the underlying granite. A gold mine has been worked close to the clump of silicified trees.

From these observations I am led to suspect that, as in some parts of the Alps, the metamorphic structure has been assumed by strata high up in the secondary series, so in the Andes the same structure has been superinduced on certain tertiary deposits which have been also penetrated by granitic and by metalliferous veins.

Dr. Daubeny has analysed a new thermal spring discovered near the town of Torre del Annunziata in the Bay of Naples, and he refers the origin of nitrogen gas in this and other springs in the volcanic region of Naples and Mount Vultur to a process of subterranean oxygenation analogous to combustion. In the excavations made in volcanic tuff and lava near Torre del Annunziata for gaining access to the spring, vestiges of walls and buildings with fresco paintings, and other traces of human art, were discovered, and vegetable mould containing the stems of reeds, similar to those now growing in the neighbourhood, and a fir and cypress tree in an upright position. The buildings must have been overwhelmed before the soil existed on which the fir and the cypress grew, as this soil was formed upon the materials which enveloped the town.

Mr. H. E. Strickland and Mr. Hamilton have examined a cavity below the level of the sea in Cephalonia adjoining the coast, into which a constant stream of sea-water is flowing, and has been flowing for years. This singular phenomenon had previously attracted the attention of Mr. Martin and of Lord Nugent and others, some of whom had speculated, like Mr. Strickland, on the probability of the water, thus descending through crevices being converted into vapour in subterranean hollows, and then carried off in other directions in the form of *stefas* or hot springs. I forbear to enlarge on this subject at present, as a description of the facts drawn up by Mr. Martin before Mr. Strickland's visit, will shortly be read to the Society.

We have received from Captain Belcher a suite of geological specimens from various parts of the west coast of Africa, with remarks on the reefs and sand-banks of that coast; and a collection from the Rev. W. Hennah, of recent calcareous limestone and volcanic products from the island of Ascension. I shall next consider some papers relating more or less exclusively to fossil zoology, which have been read at our meetings during the last session. We are indebted to Mr. Broderip for a description of some new species of fossil Crustacea and Echinodermata, which were discovered by Lord Cole and Sir P. Egerton in the limestones of Lyme Regis. One of these crustaceans belongs to a genus intermediate between the *Palinurus* and the *Shrimp*. It is of a gigantic size compared to any recent species, and belongs to a division of which the living types have been only met with in the arctic regions.

Sir P. Egerton has described some peculiarities of structure in the occipital bone of an Ichthyosaurus, observed in the skeleton of a new and gigantic species recently discovered by Miss Anning at Lyme Regis. He also states that the axis and atlas in this genus are usually found adhering firmly together, and they are connected by an auxiliary bone, showing that strength rather than freedom of lateral motion was required in the neck of these animals. These observations have been confirmed by Mr. Owen and Mr. Clift.

It has often been a question whether the bones of birds had ever occurred in strata below the chalk; some of the thin fragile bones found at Stonesfield, and formerly considered to be those of birds, having been ascertained to belong to Pterodactyls. In order to elucidate this point, Mr. Mantell lately placed all his specimens from the Wealden, supposed to be those of certain Grallæ, or waders, in the hands of Mr. Owen, and the result of his examination has confirmed Cuvier's opinion that they are true ornitholites. They seem, therefore, to be the oldest authenticated fossils of this class hitherto found in Great Britain. The rarity of such remains in geological formations, especially in the marine, cannot surprise us; for in the recent shell marl of Scotland, formed in lakes much frequented by water-fowl up to the moment of their drainage, no bones of birds have as yet been detected amongst the numerous relics of deer, ox, pig, and other quadrupeds occurring in the marl.

Mr. Darwin, in his travels to South America before alluded to, found, in crossing the continent from the Rio Negro to Buenos Ayres, many large bones of Mastodons, and other remains of the Mastodon at Port St. Julian, 50° S. lat., at a distance of more than six hundred miles from the former. He also saw, in the gravel of Patagonia, many bones of the Megatherium, and among the remains of five or six species of quadrupeds associated with them, he detected those of a species of Agouti.

Our museum has just been enriched by a truly magnificent present of fossil bones from India, more valuable than any which have reached England since those obtained by Mr. Crawford and Dr. Wallich from Ava. They were collected and presented to us by a gentleman whom we last year elected a Fellow of this Society, Captain Cantley of the Bengal Artillery, and their existence seems to have been first distinctly recognised by Dr. Falconer, superintendent of the Botanic Garden at Saharunpore. These organic remains come from the range of hills formerly called Sewalik, which skirt the base of the Himalayan mountains from the Ganges to the Sutlej rivers, or from the north lat. 30° to 31°. They abound in part of the range to the westward of the Jumna river, and belong to the genera *Mastodon*, *elephant*, *hippopotamus*, *rhinoceros*, *bo*, *anthracotherium*, *horse*, *ox*, *deer*, *antelope*, *canis*, *felis*, *gavial*, *crocodile*, *zeuglodon*, *trionyx*, besides fish and shells. Among the fossils there are some considered to be new genera, and one which Messrs. Cantley and Falconer have called *Sevatherium*.

We have also received a splendid collection of specimens of rocks from the Himalayas, illustrating the two sections published by Mr. Hoyle in his work on these mountains, from the plains to the snowy passes, and his section across the central range of India.

Several new facts have been brought to light in fossil ichthyology during the last year. Sir P. Egerton has found in the coal-field of North Staffordshire, among other remains of fish, some scales of the *Megalichthys*, that large sauriod fish first described by Dr. Hibbert as occurring at Hardhouse, near Edinborough. I have lately seen a large tooth of this fish in a mass of Cannel coal found in Piffeshire by Mr. Horner, and described by him in a paper read before the Royal Society of Edinborough. It will be remembered that these teeth were formerly referred to *Saurians*, to which, in fact, the *Megalichthys* had a much nearer affinity, according to Mr. Agassiz, than has any fish now living. Sir P. Egerton has also published a catalogue of the fossil fish in his cabinet at Oulton Park, and in that of Lord Cole, at Florence Court; two collections which are described by Mr. Agassiz as unrivalled in England in this department of organic remains, and only equalled by two others in the rest of Europe, that of Count Münster, at Bielefeld in Saxony, and that of the Royal Museum of Paris. In this catalogue Sir Philip has

given the names and localities of about 200 ichthyolites, Briffish and fossil, and has indicated the geological position of each.

Remains of fishes have been found by Mr. Freston in a formation of sandstone and red conglomerate which overlies the old sandstone in Banbury. He supposes the deposit to be of the age of the coal-measures, an opinion which is in accordance with the characters of the ichthyolites as determined by Mr. Agassiz.

One of the most perplexing enigmas in paleontology has lately been solved by Dr. Buckland, who has discovered that some enormous fossils of the colitic and cretaceous strata, which had long baffled the skill of comparative anatomists, are in fact the upper and lower jaws of extinct species of *Chimæra*, a rare genus of living fish. These fossils had been found by Sir P. Egerton in the Kimmeridge clay, by Mr. Townsend in the Portland stone, and by Mr. Mantell in the chalk. They belong to four distinct species, of which the characters are given by Mr. Agassiz. The scientific world is indebted to the splendid museum of comparative anatomy at Leyden for the opportunities enjoyed by Dr. Buckland of comparing the skeleton of the recent *Chimæra* with the fossils alluded to.

Mr. Agassiz has described two very singular genera of fossil fish from the lias, one of which has been known under the name of *Squalo-rhin* from Lyme Regis; the other from Whitby, called *Gyrogonia mirabilis*, probably the largest known fish.

Hitherto the new red sandstone in Great Britain had been destitute of all organic remains, but some distinct impressions of fish of the genus *Paleoniscus*, *Ag.*, have now been observed in this formation near Dungannon in Ireland. The geological position of these has been pointed out by Mr. Marchant, and a slab of sandstone presented to the society by Mr. Greer exhibits on a single surface only two feet square, impressions of about 350 fishes.

(To be continued.)

TIN BOUNDERS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—It is amusing to see the expiring struggles of the class of persons calling themselves bound-owners of Cornwall, who for so many years have been keeping the mines and population of that great county idle, whilst they annually performed the farce of turning up four turfs, with the hope of retaining a right which most of them have forfeited for ages.

The chief part of the ebullitions of those who have made such desperate efforts to destroy the dusky rights we pass unnoticed, but when we see statements made by some whose names or situations may give currency to the matter they advertise, it is necessary to contradict them, or show their absurdity. Of this nature is a letter which has appeared in several Cornish papers, signed "John Silverster," and which also (with an advertisement in the nature of a caution) appeared in your paper of Saturday last, the advertisement being signed "John Silverster," and witnessed "Frederick Hill." Those who carefully peruse these articles, will duly appreciate them, on seeing that the letter begins by stating that Mr. John Silverster was agent to the duchy lessee, and the notice ends by stating that he is "agent for the several tin bounders in the manor and parish aforesaid." Now are so little to be relied upon, in either their facts or their opinions, as men who have changed sides; and that is the case with Mr. John Silverster, for the bounders having appointed him their agent, because he was the duchy lessee's agent; the duchy lessee found out the truth that so man can serve two masters, and therefore discharged him from his service. But you can more easily understand how the dish was divided, "in the most perfect harmony," between the duchy lessee and the bounder, as stated in Mr. Silverster's letter; for it would have been sad indeed, if John Silverster for the duchy had come to blows with John Silverster for the bounders. Why, Mr. John Silverster and Mr. Frederick Hill know as well as any two men in Cornwall, that their wanted bound claims are never to be maintained for a moment, unless they have continually worked, and continually paid the duchy lessee his toll; and we give them and the county notice, that if they find any adventurers foolish enough in this enlightened day to take a set in duchy land under a bounder, we will, immediately on tin being raised, bring an action against such party for the full amount of the customer dues, without sharing any part with the bounder, as in the days of "perfect harmony" alluded to by Mr. John Silverster, "the agent for the several tin bounders in the manor and parish aforesaid." As to the threat in the advertisement of taking away the tin from certain mines named at the foot of the notice, and from others which are left to imagine themselves included in the words "et cetera," if Mr. Hill and Mr. Silverster "the agent for the several tin bounders in the manor and parish aforesaid," go on any such mad expedition, we hope the adventurers in those mines know how to defend themselves from plunder by day or by night; and as to any legal measures to deprive them of their tin, any man who knows any thing of present mining rights in the county of Cornwall, will guarantee them against all the bounders for half-a-crown.

Why do not these gentlemen, instead of exposing themselves by their advertisements, bring an action at law to recover any one sett of bounds in the whole county, or bring an action to recover found dues from any adventurer who has not pledged himself by deed or agreement to pay them; and then if they succeeded, they might advertise with some grace, but they can hardly hope that advertisements will give them what they cannot maintain by law; the public are not so shallow as to be thus deceived; and we give them this open challenge, that we will take the full toll of any parties working under them, and defend any action they may bring against Captain Crease, for their alleged half or any portion of it.

We just add, that we have this moment received the unequivocal opinion of no lesser authorities than Sir W. W. Follett and Mr. Butt, that Captain Crease should continue to grant licenses in the waste lands of the duchy of Cornwall, as well as the enclosed lands, just as he had been accustomed to do.

We are, Sir, yours most obediently,

BARTLETT & BEDDOME.

27, Nicholas-lane, Lombard-street, London.

May 4, 1836.

THEORY OF COMPRESSION APPLIED TO THE INTERNAL CONSTITUTION OF OUR EARTH.

In a note on the subject of the *Compression of Water*, in the new edition of his "Elements of Natural Philosophy," Professor Leslie has thrown out some opinions which are singularly calculated to arrest attention by their boldness, ingenuity, and originality. He had lately an instrument constructed by Mr. Adie, capable of sustaining the force of fifteen atmospheres, which indicates the compressibility of substances, both solid and fluid. With this he has made various experiments, which serve as a ground-work to certain novel and curious conclusions as to the internal constitution of the globe, which we are now to notice. The power of internal gravitation upon any object is directly as its distance from the centre—hence the density of bodies must vary greatly according to their depth under the surface. The professor gives formulae for atmospheric air, water, and white marble. From these he infers, that air would have the density of water at a depth of 331 miles, and the density of quicksilver at a depth of 197 miles under the surface. Water, again, would be compressed into half its bulk at the depth of 93 miles, and would have the density of quicksilver at 362 miles. Even marble, incompressible as it seems on a superficial view, would have its density doubled at the depth of 297 miles. Each substance has its distinct ratio of compressibility. It is more rapid in the case of water than of marble, and in the case of air than of either. Water and air would have the same density at 35 miles of depth, and water and marble at 173 miles (neglecting fractions). At the depth of 336 miles, or the tenth part of the distance from the surface to the centre, marble would have 24 times its density at the surface, water 44 times, while air would have its density increased to the enormous extent of 101,960 billions of times. At the centre, marble would be compressed 119 times, water 3,000,000 of times; and, with regard to air, the condensation would be inconceivable, the number required to express it being 764, with 166 ciphers annexed. From these results, founded on experiment, some singular propositions, the professor observes, are deducible respecting the internal structure of the globe. It follows, in the first place, that if the entire mass is composed of such materials as are visible at the surface, the compression of the parts within will mount so rapidly as we descend, that the mean density of the whole will far exceed that of five times the density of water, which results from the experiments of Maskell and Cavendish. The globe must therefore be hollow or cavernous; and to bring down the density to the ascertained standard, the crust or shell on which we tread must bear but a small proportion to the diameter of the sphere. On the other hand, an absolute void is inadmissible; for, to prevent the walls of the central cavern from being forced together by the enormous pressure they are subjected to, it must be filled with something, and that something must have a vast repulsive power. Now, there is but one substance we are acquainted with which possesses the necessary elasticity, and that substance is light, "which, when embodied, constitutes elemental heat or fire." It is "elicted from every substance by percussion or compression, electrical agency, or chemical affinity; and, travelling at a rate which exceeds by 600,000 times the velocity with which air rushes into a vacuum, its elasticity is sufficiently great to balance the cumulative compression of the enveloping mass." We are thus led, by a close train of induction, to the most important and striking conclusion. The great central concavity is not that dark and dusky abyss which the fancy of poets has pictured. On the contrary, this spacious internal vault must contain the purest ethereal essence. Light in its utmost concentrated state, shining with intense brilliancy and overpowering splendour."—*Southern Review*, 1836.

GLOSSARY OF ENGLISH MINING TERMS.

The publication of a double sheet affords us the opportunity of closing the first section of our Glossary of Mining Terms.

CORNWALL.

(Continued from No. 36.)

Fast—The firm rock beneath the alluvium.
Feeder—A branch when it falls into the lode.
Flang—A two-pointed pick.
Flat rods—Rods for communicating motion from the engine horizontally.
Flour tin—Tin ore scarcely perceptible in the stone; tin ore stamped very small. (Pryce.)
Fluke—The head of the charger; an instrument used for cleansing the hole previously to blasting.
Flucon—A soft clayey substance which is generally found to accompany the cross-veins and slides, and occasionally accompanies lodes; but when applied to a vein means a cross-vein or course composed of clay.
Footwall—Is the wall under the lode; it is sometimes also called the underlaying wall.
Footway—The ladders by which the workmen ascend and descend.
Forcepiece—A piece of timber put in a level, shaft, &c., in a diagonal position, for keeping the ground open.
Fork—"Water in fork," water all drawn out; the bottom of the engine-shaft.
Furnace—The place in which the ore is placed for the purpose of smelting or reduction.
Gad—A pointed wedge of a peculiar form, having its sides of a parabolic figure.
Ghat—Mica.
Good levels—Levels driven nearly horizontal.
Gossan—Oxide of iron and quartz, generally occurring in lodes at shallow depths.
Grass—The surface.
Grain tin—Crystalline tin ore; metallic tin smelted with charcoal.
Grate—Stamps grate; a metallic plate pierced with small holes; it is attached to the stamps, and through the holes the stamped ore escapes therefrom.
Griddle or riddle—A sieve.
Grinder—Machinery for crushing the ores between iron cylinders or barrels.
Grossen—Decomposed granite; but sometimes applied to the solid rock.
Ground—The country; the stratum in which the lode is found.
Gulph of ore—A very large deposit of ore in a lode.
Gunnies—Levels or workings.
Gurt—A gutter; a channel for water.
Halvaner—The dresser of, or operator on the halvans.
Halvans—The ores which are not sufficiently rich to be offered for sale until much of the impurities with which they are mixed is removed by operations in water.
Hanging wall—The wall or side over the lode.
Hauling—Drawing ore or attle out of the mine.
Head road—The water running through the adit.
Heave—The horizontal dislocation which occurs when one lode is intersected by another having a different direction. A right or left hand heave is when the part of the intersected lode on the opposite side of the traversing vein is found by turning either to the right or left.
Hook handles—The handles by which a windlass is worked.
Horse—The dead ground included between two branches of a lode, at the point of their separation.
Horse arm—The part of a horse-whim to which the horses are attached.
House of water—A vault or space, whether artificially excavated or not, filled with water.
H. Piece—See Aitch piece.
Hutch—Cistern or box.
Jigger—Cleaner of the ores.
Jigging—Separating the ore with a griddle or wire-bottomed sieve, the heavier substance passing through to the bottom or lower part of the sieve; the lighter substances remaining on the upper part are put by for halvans.
Iron stone—Hard clay slate—horn-blende—horn-blende slate—horn-stone.
Junction—Applied to where veins unite.
Juniper—A long borer, worked by one person.
Kevee—A large vat.
Kibble—A bucket usually made of iron, in which the ore, &c. are drawn to the surface.
Kibble filler—Man who sends up work, &c. to the surface.
Killas—Clay slate.
Lander—Man who attends at mouth of shaft to receive the kibble in which ores, rubbish, &c. are brought to the surface.
Lappier—The dresser of the levings.
Laths—The boards which are put behind and supported by the "durns."
Launders—Tubes or gutters for the conveyance of water—their form that of a long box, wanting the upper side and both ends.
Leader of the lode—A branch or small vein—part of the main lode.
Leaves—Empty places—old workings or vugs.
Leat—A water-course. (Pryce.)
Leavings—The ores which are left after the "crop" is taken out.
Levels—Galleries driven on the lode usually at 10, 20, 30, &c. fathom below the adit level.
Lifters—Wood beams, to which the iron heads of a stamping mill are fastened.
Lock piece—A piece of timber used in supporting the workings.
Lode—A regular vein producing or affording any kind of metal.
Lochs—Slime containing ore.
Last levels—Levels which are not driven horizontally.
Machine whim—A rotatory steam-engine employed for winding.
Mallet—An instrument used with the borer.
Material man—One who delivers out and has care of the materials.
Meat earth—The vegetable mould.
Mock lead—Blende.
Moorstone—Granite.
Mundie—Iron pyrites.
Needle or Nail—A long taper piece of copper or iron with a copper point, used when stamping the hole for blasting, to make by its withdrawal an aperture for the insertion of the rush or train.
Owner's account men—Workmen paid at so much per day.
Pack—To occasion the speedy subsidence of the ore in the process of tossing or chiming, by beating the kevee in which it is performed by a hammer.
Pair—Gang or party of men.
Parcel—A heap of ore dressed, and ready for sale.
Pate—An opening left for letting down stuff to the level.
Peach—Chlorite.
Peda Cairn—A bunch of ore at a distance from the lode.
Pick—An instrument of common use, as well in agriculture as in mining.
Picker or Piker—A hand-chisel for dashing, which is held in one hand, and struck with a hammer.
Pillar—A piece of ground left to support the roof or hanging wall.
Pitch—Limits of the piece of ground set to tributaries.
Pitch bag—A bag covered with pitch, into which powder is put (previously to its being introduced into a damp hole), that it may be protected from moisture.
Pitman—One employed to look after the lifts of pumps and the drainage.
Pitcock—The pumps and other apparatus of the engine-shaft.
Plat—Ground taken away to contain any ores or deads.
Plunger—The piston or forcer of a forcing pump.
Plunger lift—The sets of pipes attached to a forcing pump.
Point of the horse—The spot where the vein is divided into two or more branches.
Pol-raz—Pronounced polrose, the pit underneath a water-wheel.
Pol-gross—Soft decomposed granite.
Prian—Soft white clay, esteemed a favourable indication when found in a lode.
Pril—A solid piece of ore; a specimen.
Produce—Fine copper contained in one hundred parts of ore.
Purer—The cashier or paymaster at the mines.
Quere—A small cavity or fissure.
Rack—An inclined frame on which the ores and slime are washed and separated.
Rackwork—Is a process of separating small ore from the earthy particles by means of an inclined wood frame; the impurities being washed off, and the ore remaining near the head of the rack taken from thence undergoes tossing.
Reed or spire—Gorse, or other tubular vegetable, into which gunpowder is put to convey a train from the snuff to the charge, the reed being put into the aperture made by the needle.
Reefing—Separating the ores.

Relief—When one workman of the same pair changes core, or takes the place of another.
Riddle or griddle—A sieve.
Rising—Digging upwards.
Road—Large stones, rough.
Rollers—The persons who work the wheelbarrows under ground.
Rua—When excavations fall together.
Run of a lode—Its direction.
Rush—Used for the same purposes as the reed and spire.
Seal—A shale or portion of earth, rock, &c., which separates and falls from the main body.
Scorean lode—A lode having no gozzan on its back or near the surface.
Scraper—A piece of iron used to take out the pulverised matter which remains in the hole when bored previously to blasting.
Seam—A horse lode.
Set—A number of mines taken upon lease.
Set of timber—A frame complete to support each side of the vein, level, or shaft.
Set off—The part of a connecting rod to which the bucket rod is attached.
Shaft—A sinking or pit either on the lode or through the country.
Shaking—Washing the ores.
Shammel—When ore or water is lifted part of the required height by one machine or person, and part by another.
Shears—Two very big pieces of wood placed in nearly a vertical position on each side of a shaft, and united at the top, over which, by means of a pulley, passes the capstan rope. This is for the convenience of lifting out or lowering into the shaft, timber, or other things of great length.
Shelf—The firm rock.
Shice—The pulley over which the whim-rope passes.
Shoading—Tracing round stones from the vale to the lode whence they were torn by the deluge, or by some convulsion of nature.
Shooting—Shutting or blasting, fracturing and separating by the use of gunpowder.
Sinking—Digging downwards.
Skimpings—Skinnings of the light ores, &c., in the dressing processes.
Slide—A vein of clay, which, intersecting a lode, occasions a vertical dislocation.
Slimes—Mud containing metallic ores; mud or earthy particles mixed with the ore.
Smelting—Reducing the ores by means of fire.
Snuff or match—A substance, frequently brown paper, or other slowly combustible substance, which is ignited at one end, the other being in contact with the rush or train in blasting; the slow combustion is to permit the escape of the labourers.
Sollar—A small platform at the end of a certain number of ladders.
Spalling—The breaking up into small pieces, for the sake of easily separating the ore from the rock, after which it undergoes the process of cobbing.
Span beam—The horizontal beam passing over the whim in which the upper pivot of the perpendicular axis moves.
Spar—Quartz.
Spend—To break ground; to work away.
Squat of ore—See Bunch.
Stamps—Machinery for crushing the ores with the presence of water.
Stamp head—The iron weight or head connected with the stamps.
Standard—The price of fine copper.
Stannary laws—Regulations for the management, &c. of tinners, administered by equity judges resident in Cornwall and Devon.
Stem—A day's work.
Slope—A horizontal bed.—To slope, to excavate horizontally, layer after layer.
Strake—A launder or box of wood without ends, in which the process of washing or tying is performed.
Strapping plates—The iron plates by which the connexion rods are fastened to each other.
Stream tin—Tin ore found in the form of pebbles, most frequently in vales.
Streamers—The persons who work in search of stream tin.
String—A small vein.
Stuff—Attle or rubbish.
Stull—Timber placed in the backs of levels, and covered with boards or small poles to support rubbish.
Sturt—When a tributary takes a pitch at a high tribute, and cuts a course of ore, he sometimes gets two, three, to five hundred pounds in two months; this great wages is called a sturt.
Sump—A pit; the bottom of the engine-shaft.
Sump shaft—The engine-shaft.
Sumpmen—The pitman's assistants; men who attend to the machinery in the engine-shaft.
Tackle—Windlass, rope, and kibble.
Tamping—The material, usually soft stone, placed on the gunpowder, in order to confine its force, which would otherwise pass up the hole; also the process of placing the material.
Tamping iron or bar—Tool used for beating down the earthy substance on the charge used in blasting.
Teem—To ladle water in bowls.
Thrown—either up or down.—Is when a slide intersects a lode, the dislocation being shown by a transverse section.—Thrown up, is when the undiscovered portion of the intersected lode is found to have been apparently lengthened.—Thrown down, is the reverse.
Ticketings—The sale of ores.
Timber man—The man employed in placing supports of timber in the interior of the mine.
Tollar—A person who periodically examines the limits of ground producing tin ore belonging to himself or (the lord) his employer.
Ton—The ton varies in different districts: the common ton is 20 cwt. of 112 lb., or 2,240 lb. In Cornwall, the mining ton is 21 cwt. of 112 lb., or 2,352 lb. Tin is sold in Cornwall by the 1000 lb., and not by the ton.
Tossing or Tazing—A process consisting in suspending the ores by violent agitation in water, their subsidence being accelerated by packing; the lighter and worthless matter remain uppermost.
Trade—Attle or rubbish.
Tram carriage—The carriage (usually made of iron) used on a tram-road.
Tram road—Iron railroad way.
Treloving—See Tossing.
Tribute—Proportion of the ore which the workman (tributer) has for his labour.
Tributers—Men whose pay is a certain proportion of the ore or value of the ores they raise.
Tribute pitches—The limited portions of a lode which is set to "a pair" of tributaries, beyond which they are not for the time being permitted to work.
Tunnel head—The top of a furnace, at which the materials are put in.
Trunk—A long narrow cistern or pit, in which the ore and slime which are mixed are separated by the subsidence of the former, and the washing off the impurities—the inclined box in which the ore and slimy impurities are separated in the process of trucking.
Trucking—Process of extracting ores from the slimes; subsequently the ores undergo the processes of racking and tossing.
Tumblers—A great quantity; a heap.
Tut work—Work in which the labourer earns in proportion to the amount of his labour; being paid for driving at a certain price per fathom.
Tugers—The aperture through which the air or blast is introduced into the furnace.
Tying—Washing.
Underlayer—A perpendicular shaft, sunk to cut the lode at any required depth.
Underlayshaft—Shaft sunk on the course of the lode.
Van—To wash and cleanse a small portion of ore on a shovel.
Vugh or cove—A cavity.
Washing—The ore undergoes occasionally two or three washings; the first process being that of washing the slime and earthy particles from the rougher and larger stones of ore.
Water in fork—When all the water is extracted.
Well—The lower part of a furnace into which the metal falls.
Whim—A machine worked by horse, steam, or water, for raising ores, &c.
Whim driver—Man who attends to the horse in the whim.
Whim rope or chain—The rope or chain by which the kibble is attached to the winding engine or whim.
Whim shaft—The shaft by which the stuff is drawn out of the mine by horse or steam whim.
Whip and derry—A kibble drawn to the surface by a horse, the rope attaching one to the other simply passing over a pulley.
Whisk or wize—Contraction of windlass; the wheel and axle frequently used for drawing water, &c., in a kibble, by a rope.
Windshore—The lowest pump in which there are holes to admit water.
Winding engine—One used to draw up ore, attle, &c.
Wize—A sinking on the lode communicating one level with another for proving the lode or for ventilating such drivings.
Word—Ores before they are cleansed or dressed.
Working barrel—The pump in which a piston works.
Working bit—Sufficiently large for a man to work in.
Zawn—A cavern.
Zigzag—When a small slow stream of water issues through a crevasse, it is said to zigzag or sigger. (Pryce.)

CARN BREA.

(Continued from No. 36.)

Alfred was now joined by such of his countrymen as had taken refuge in Cornwall; the ancient Cornish were also anxious to swell his ranks, and the gallant Prince was soon in a condition to give battle to the treacherous and daring barbarians; and, by strenuous efforts, he so far humbled his opponents that they once more sued for peace, and readily stipulated with Alfred, that on his assigning them a place of residence in his kingdom, they would become his peaceable and loyal subjects, and unite to defend him against every foe, even though it were their own countrymen. It was not long, however, before another formidable body of Danes effected a landing, and this treaty, like every other, was scarcely concluded, ere it was broken. Alfred's newly-acquired subjects readily threw off their allegiance, and, joining the ranks of their countrymen, they set on Alfred's little camp, dispersed his few remaining followers, and recommenced their depredations. Alfred was still firm: he endeavoured to rally his scattered forces; but his subjects were now reduced to a state of desperation. Some of them had even submitted to the Danes, and endeavoured to appease their fury, by the most degrading servility. Others, careful only for their personal safety, sought refuge in such wilds and fastnesses as were afforded them by Wales and Cornwall; and not a few of the ancient Britons sought and found a temporary refuge under the ample shadow of Carn Brea.

The ensigns of royalty now no longer graced the brow of Alfred. His dignity was laid aside; and he was obliged to dismiss his attendants, not excepting his very menials. In a garb by no means distinguished from that of his meanest subjects, he wandered from place to place seeking shelter from the treacherous foe. He even condescended to embrace the meanest occupations, and to bear the reproaches consequent upon the neglect of his servile duties. The depth of his own misery did not render him callous to the wounds inflicted on his country; but he almost daily annexed danger to distress while in pursuit of means to procure her redress. His attention to the enemy's movements were incessant, and his diligence increased with their negligence. He took care to visit the different stations of his dispersed followers; apprising them from time to time of the state and condition of the enemy, and of the nature of their own prospects, and many were the visits which the gallant Prince paid to the ancient Cornish at Carn Brea. The Cornish, in common with the rest of their countrymen, appreciated the noble bearing of their patriotic leader—in prosperity Alfred was admired, in adversity he was adored.

The negligence of the Danes had now become so notorious, that Alfred collected a few of the bravest of his devoted adherents from Carn Brea, and other similar retreats, with whom he took up and fortified a position, which enabled him to sally forth to surprise and plunder the enemy. His position, though not remote, was guarded by paths so intricate, leading through woods and morasses so inaccessible, that the Danes, though frequently suffering from his vigorous sallies, were utterly unable to comprehend by what arm the blows were inflicted. By thus plundering the enemy, Alfred supported his little band. By the invariable success of his well-planned enterprises, he gratified their vindictive feelings, and raised their future hopes; he trained them to deeds of nobler daring, and taught them to look forward to a consummate revenge. While Alfred was thus engaged, Cornwall and Carn Brea had respite. But such of his adherents as had located themselves in Wales were less fortunate. Hubba, at the head of a formidable body of Danes, plundered them without mercy; and Alfred was not a little grieved at his inability to revenge them. Retribution, however, was at hand. The Danish chief, after ravaging Wales, embarked his forces and made sail, promising them an additional booty in Devon and Cornwall. This sanguinary horde landed on the coast of Devonshire, and proceeded to besiege the Earl of Devon in his castle of Kenwith. The Earl had been trained to arms in Alfred's camp; and the disciple was worthy of his master. A devoted patriot, he was willing either to live or die for his country. A consummate general, he determined to be beforehand with the enemy. At the head of a select body of his little garrison, he sallied out under cover of night, and, taking the Danes by surprise, routed them with terrible slaughter. Their enchanted standard, by which the success of their expeditions was divined, was taken, and Hubba himself was among the slain. This signal victory tended to elevate the hopes of Alfred and his adherents; the joyful tidings quickly flew through the length and breadth of Devon and Cornwall; and victory's flag floated triumphantly on every hill from Castle Kenwith to Carn Brea.

(To be continued.)

THE PYRAMIDS OF EGYPT.

A communication, with which we have been favoured, through the medium of his brother in London, by Mr. Waine, of Cairo, announces the discovery of some interesting remains of antiquity in the mounds of Cairoun, near the Mahmoudieh canal. Excavations made for the purpose of procuring building materials have laid open an immense quadrangular structure, apparently warehouses, and portions of two monuments, one of which, at present only partially uncovered, is of the age of Rameses II., the supposed Sesostris; the other, which was no sooner found than destroyed, was a temple of the Ptolemaic period, and bears the name of Soter and Philadelphus.

Mr. Waine considers it probable that the extensive mounds of Cairoun occupy the site of Schedia, situated at the junction of the canal from Alexandria with the Canopic branch of the Nile. In the time of Strabo it was a populous town, and the place where the customs were levied, as well as the rendezvous of the yachts in which the governors used to ascend the Thebaid. Excavations are still going on, and if any thing of importance should be found, we hope to receive an early notice of it.

The barrage of the Nile being at a stand-still for want of materials, a proposal was made to destroy one of the Pyramids, in order to employ the stone in the new work. The Pyramid of Mycerinus, or more properly of Nitocris, was the one fixed on, but when the Vandals came to estimate the cost of pulling down and removing even the smallest of the three great monuments at Gizeh, the undertaking was abandoned as hopeless; so that the traveller may still have the satisfaction of contemplating what so many ages have looked on as the wonder of the world. It is not to be believed that the Pasha himself suggested this work of destruction; indeed, we cannot believe that he would ever have given his sanction to an undertaking which would have called down the execration not only of lovers of antiquity, but of Europe in general; and might have put the name of the regenerator of Egypt on a par with that of Malik-elaziz Othman ben Yousouf, who allowed himself to be persuaded by some of his courtiers to make a similar attempt upon this very pyramid of Mycerinus, and whose singular failure has been related by the pen of a contemporary historian. The idea of raising a pyramid is so strange, that the report of Abdallatif, on the former attempt, may interest our readers. "The sultan sent sappers, miners, and quarriers, under the direction of some of the principal officers and first emirs of his court, with directions to destroy it. For this purpose a camp was established near the Pyramid, and a great number of workmen were collected, and maintained at an immense expense. They remained there eight months, occupied in the execution of their orders, and contriving every day, by infinite pains and labour, to remove one or two stones. Some above displaced them by means of wedges and levers, whilst others below employed cords and cables. When, at length, a stone was thrown down, its fall made a terrible noise, that might be heard at a great distance, shaking the ground and making the mountains tremble. On reaching the bottom, it became buried in the sand, and to withdraw it great efforts were again necessary: holes were now made in the stones, wedges driven in, and the masses being given into many parts, were carried piece by piece on carts to the foot of the mountain, which is near at hand. After being long encamped in this place, and having dissipated their pecuniary resources, finding that their labour increased whilst their resolution diminished, and their strength was already exhausted, they were compelled shamefully to relinquish their undertaking. Far from attaining the success which they had anticipated, they obtained no other advantage than that of injuring the Pyramid, and displaying their imbecility."—*Athenaeum*.

The M. C. Tin Works, in this town, after a repose of twelve years, during which the sound of the hammer has not been heard, are now vigorously at work. Much benefit is expected to the trade and general prosperity of this place from the circumstance, and much gratification is felt at the activity already displayed.—*Cornwall Journal*.

FATAL ACCIDENT AT WHEAL STRAWBERRY.—On Tuesday last, as a great many miners were employed at the capstan and cat-head of Wheal Strawberry mine, in the parish of Crowan, in consequence of a breakage at the cat-head, the capstan, unable to sustain the weight, ran, carrying every thing before it. Two of the unfortunate miners were killed on the spot; one is so severely hurt, that no hopes are entertained of his recovery; and several others are injured, some seriously. The damage done to the machinery is also said to be very considerable. It was a purely accidental occurrence, and no blame, that we have heard of, attaches to any one.

	FLOUR, per sack.	
Town made.....	43s to 48s	Essex & Suffolk, on 1 board..... 34s to 40s
Seconds.....	40s to 43s	Norfolk and Strickland..... 32s to 37s

SMITHFIELD, Friday, May 13.

The market looks dull this morning, with scarcely any exception. Lard, notwithstanding the present favorable weather, has lost in value from Monday's selling 4d. In other things there is little alteration in price.

To sink the offer—per cwt.

Beef	3s. 4d.	4s. 4d.	4s. 10d.	Veal	0s. 0s.	2s. 6d.	3s. 0d.
Best Down & Fatted Mutton	3s. 4d.	4s. 4d.	4s. 10d.	Pork	3s. 0d.	0s. 0d.	0s. 0d.

Head of Cattle th/day—Eweats, 605; Sheep, 5,110; Calves, 210; Pigs, 487.
Head of Cattle on Monday—Beasts, 1,309; Sheep, 12,450; Calves, 120; Pigs, 300.

NEWGATE AND LEADENHALL.—By the Carcase.

Beef	2s. 6d.	3s. 6d.	4s. 2d.	Pork	3s. 6d.	4s. 6d.	4s. 10d.
Mutton	3s. 6d.	4s. 4d.	5s. 0d.	Veal	3s. 4d.	4s. 4d.	5s. 0d.

Lamb, 2s. 6d. to 6s. 4d.

LADY-DAY COINAGE, 1836.		SECOND PART.		Grand Totals.	
DEVON.		Grain	Coinage	TOTAL.	
MORWELLHAM—Crownland.	Devon Smetting Co.		91		91
CORNWALL.					
STALOCK—Calstock.	Devon Smetting Co.		45		45
St. Austell—Blowing House.	Daubus and Co.				
	Charlestown.				
THRU—Calstock.	Boltho	99	179	449	
	Michell	45	100		
Trethellan.	Grenfell and House	79	647	799	
Carvedra.	Daubus and Co.	94	510	610	
Blowing House.	Daubus and Co.				
	Charlestown.				1799
HELSTON—Huel Vor Adventurers					
HAYLE—Huel Vor Adventurers			96	96	
Trellick.	Grenfell and House		547	567	
Angarrack.	Boltho		42	388	
	Cornish		30	30	
Chyandour.					
	Boltho		50	50	
Treloweth.	Daubus and Co.				
Trevel.	Batten				1021
PENANCE—Huel Vor Adventurers			99		
Trevel.	Batten		707	707	
Treloweth.	Daubus and Co.		281	281	
Chyandour.	Boltho		201		
	Cornish		176	577	
Trellick.	Grenfell and House		51	51	
Angarrack.	Boltho		100		
	Cornish		92	201	
					1746
Total				4678	
First Coinage				1212	
Quarter's Total				5890	

SALE OF BLACK TIN.
Sampled May 6, and Sold at Helston the 10th.

Music.	Tons.	Cwt.	Price.	Amount, in money, of each Parcel.	Amount, in money, of each Mus.
			<i>£ s. d.</i>	<i>£ s. d.</i>	<i>£ s. d.</i>
Wheal Vor	22	..	71 15 0	1578 10 0	
	8	..	64 10 0	518 0 0	
					2,094 10 0
Great Work	16	..	78 2 6	....	1,260 0 0
Wheal Trumpet	4	..	73 15 0	....	295 0 0
Wheal Ann	14	..	74 7 6	....	92 19 4
Tons....	54				3,732 9 4

37321. 98. 43.

PURCHASES OF BLACK TIN.

Purchaser.	Wheat.	Tons.	Total Tons.	Price.	Amount.	Total Amount.
DAUBER & Co.	Wheat Vor	8		\$ 5. 8.	\$16 0 0	
	Wheat Ann.....	14		7 4 6	102 19 4	118 19 4
			94			
GREENWELL & BOASE.	Great Work.....	16	16	78 2 6		1250 0 0
BATTEN & SON	Wheat Vor	22	22	71 15 0		1578 10 0
BOLITHO,						
CARNE, COR-						
nien, and Co.	Wheat Trumpet...	4	4	73 15 0		295 0 0
			514		Total ..	3733 9 4

PURCHASES OF COPPER ORES AT CAMBORNE,
MAY 6, 1896.

Purchasers.	Units.	Tons.	Total Tons.	Price.	Amount.	Total Amount.
NO. 2.				d. s. d.	s. s. d.	d. s. d.
2. ENGLISH	Consolidat. Mines	35		8 2 0	280 10 0	
COFFER CO.	.....	63		6 17 9	431 11 0	
.....	.....	50		4 1 0	222 10 0	
.....	North Boskew ..	90		6 12 0	558 8 6	
			292			1691 4 6
3. VIVIAN & SONS.	United Hills ....	..	126	8 16 6		481 19 9
4. FREEMAN & CO.	South Boskew ..	62		8 19 6	870 9 0	
.....	Wheel Chance ..	93		8 7 6	499 17 6	
.....	East Whl. Crofty	34		11 19 0	404 12 0	
.....	Dolomene ..	24		9 19 0	214 16 0	
.....	Wheel Sparrow ..	9		5 3 0	46 7 0	
			222			1626 1 6
5. P. GREENWELL & SONS.	Consolidat. Mines	44		6 4 0	272 16 0	
.....	.....	53		6 14 6	366 1 0	
.....	North Boskew ..	96		5 6 6	289 14 0	
.....	.....	107		6 5 6	671 8 6	
.....	.....	103		8 13 0	881 19 6	
.....	.....	101		6 19 6	669 8 6	
.....	.....	81		8 4 0	654 4 0	
.....	.....	72		6 14 0	296 8 0	
.....	.....	49		6 16 0	313 4 0	
.....	South Boskew ..	102		6 3 0	627 6 0	
.....	East Whl. Crofty	34		11 19 0	404 12 0	
.....	Dolomene ..	24		2 7 6	208 9 6	
.....	.....	45		2 1 0	112 1 0	
.....	.....	54		8 9 0	139 10 0	
.....	.....	31		4 0 0	123 0 0	
			107			2099 18 6
6. CROWN COFFER CO.	Consolidat. Mines	126		7 13 6	869 7 6	
.....	.....	115		6 19 6	922 2 0	
.....	.....	89		7 4 6	643 0 6	
.....	.....	73		6 4 0	372 16 0	
.....	South Boskew ..	43		3 3 0	146 19 0	
.....	Wheel Harriet ..	25		2 13 6	70 12 6	
.....	.....	9		5 3 0	45 7 0	
			540			3079 5 6
7. NEWELL, SONS, DAUGHS. and Co.	Consolidat. Mines	81		6 12 6	506 12 6	
.....	.....	35		8 2 0	283 10 0	
.....	United Hills	86		9 14 6	963 6 0	
.....	.....	80		6 6 0	504 9 0	
.....	East Whl. Crofty	34		11 19 0	404 12 0	
.....	Dolomene ..	42		9 19 0	615 19 0	
.....	.....	40		7 7 6	295 0 0	
.....	South Wh. Bassett	77		6 2 0	462 14 0	
.....	.....	65		8 19 6	286 7 6	
.....	.....	29		6 5 0	175 0 0	
			619			4981 9 6
8. WILLIAMS, FOSTER & CO.	Consolidat. Mines	110		5 6 0	594 0 0	
.....	.....	79		9 4 0	647 16 0	
.....	.....	33		10 18 0	353 14 9	
.....	North Boskew ..	26		8 6 6	289 14 0	
.....	United Hills	115		6 11 6	721 5 0	
.....	.....	90		3 19 0	391 1 0	
.....	Fowey Consols ..	92		8 1 6	742 18 0	
.....	.....	443		5 13 0	224 14 6	
.....	.....	44		6 12 0	290 9 0	
			647			4292 16 6
9. BENSON, LOCKE and Co.	East Wh. Crofty	117		7 3 6	805 9 6	
.....	.....	87		5 8 6	437 8 6	
.....	Skewen's Ore ..	19		1 17 6	18 15 0	
			214			1266 7 6
10. GLASSGOW and Co.	Consolidat. Mines	25		8 9 0	632 10 0	
.....	.....	20		10 18 0	359 14 0	
.....	North Boskew ..	36		8 6 6	309 14 0	
.....	Fowey Consols ..	443		5 1 0	224 14 6	
.....	.....	44		6 12 0	290 9 0	
			522			1866 5 6
	Total Tons.		3773		Total	30554 0 6

PRICES OF SHARES—continued.

JOINT STOCK BANKS

No. of Shares.	Amount paid.	Price.	No. of Shares.	Amount said.	Price.
10,000 Agricultural of Ireland	8	6	3,000 Dev. & Agr. B. Co.	20	36
5,000 Australasia	40	594	18,000 Lond. & Westm.	20	264
1,000 Bank of Scotland	40	170	3,000 Lancaster	20	30
10,000 Bank of Birmingham	18	13	25,000 Liverpool	20	30
16,000 Birmingham Bk.	18	13	25,000 Man. & L. B. Co.	15	22
8,000 British L. Co.	100	240	30,000 Manchester	20	35
3,000 Commercial	100	180	5,000 National Scotland	18	154
Colonial	10	16 10 1/2	20,000 Nat. Bnk. Ireland	12 1/2	17
3,000 Equitable Ln. Co.	9	10	10,000 Nat. Prov. Eng.	25	304
2,000 Glasgow Union	50	62	1,000 Nor. & Cent. Bk. of En	10	30
10,000 Gloucestershire	7 1/2	15	20,001 Prov. Bk. of Irel.	25	582
5,000 Halifax	5	8 1/2	2,000 Royal Bank of Ireland	180	170
6,000 Hampden	5	8 1/2	30,000 South African	20	30
5,000 Huddersfield	20		4,000, 000 Western of Scot.	30	37
10,000 Hibernian	25		20,008 Wilts & Dorset	8	9

BRIDGES.

BRIDGES.

1,600 Hammersmith ...	50	23	5,000 Waterloo	100	34
7,231 Southw., old 63 $\frac{1}{2}$ ft. ...	28	44	5,000 Do. old Ann. of 8 $\frac{1}{2}$ ft. ...	60	
1,700 Do. New of 7 $\frac{1}{2}$ p. ct. ...	30	14	5,000 Do. new do. of 7 $\frac{1}{2}$ ft. ...	40	
6,000 Vauxhall 70 $\frac{1}{2}$ ft. ...	108	22	6,000 Metropoli. Suspen. ...	2	

WATER WORKS.

4,800 Birmingham....	28	26	1,500 Nw. Riv. London		
121 Colchester ...	100		1,500 B. W. Aa.	58	
4,433 East London ...	100		6,486 Manch. & Salford ...	100	22
4,000 Glasgow ...	50		800 Portman Island ...	50	
4,500 Grand Junction ...	41	53	1,500 Portman & Farlign. ...	50	
5,400 Edin. Joint Stock ...	25	37 $\frac{1}{2}$	300 Do. New ...	50	46
2,000 Kent ...	100	46	1,000 Vauxh. it S. Lon. ...	100	84
388 Liverpool Bootle ...	220	310	8,240 W. Midld. 63 $\frac{1}{2}$ ft. ...	94	76

WATER WORKS.

ROADS.				
535 Archw. & Kent Tp.	30		492 Great Dover Str.	70
290 Barking.....	100	224	2,393 Hightgte Arch.	307. 98.
1,200 Commercial ..	100	94	11,603 New North Rd.	Stock
2,000 Do. E. 1. Dock Str.	100	59		

LITERARY INSTITUTIONS.				
Adel. Gal. of Sci.	50		700 Russell	254
1,000 Lon. with Br. Tek	784	204	King's College.	100

PRICES OF SHARES AT LIVERPOOL.

1,500 London Unvers. 100		24					
MISCELLANEOUS.							
10,000	Anglo Mex. Mm.	10	9 1/2	10,000	Ed. & Leith Glass	16	8 1/2
10,000	Australian Agr.	20	4 1/2	2,500	Essex Mar. Salt	6 1/2	
1,080	Auction Mart ...	50		15,000	Gen. St. Nav. e. d.	18	27
8,600	Br. Rock & Pat. Silt	35			Hudds. Bay St. e. d.		
	British Annuity	50		2,000	Lon. Cm. Sal Rms	7 1/2	
	British Alkali....		17 pm		New Corn Ex...		
6,000	Brit Armr. Ld. Co.	13	10 1/2		N. Bruus. (Land)	22	25 1/2
10,000	Canada Comp...	22	32 1/2		Mexican, &c.	2	
200,000	Up. Canada Loan		4 pm	12,000	Pat. Purif. Sea Wat.	2	1 1/2
	Carron Iron Co.	250		10,000	Rio Doce	2	
	City Bonds, 4 pct.	104	103	2,754	Rever. Inter. So.	100	132
	Cent. Amr. Ld.	20	15 1/2	2,653	Ditto New	50	77
75	Cov. Gar. Tr. Bnd	500		2,000	Shotts Iron Fo.	38	28
300	Drury Lane do.	500		4,000	Tilmanes Tunnel	50	18
2,122	Bd. Frontiers	100		14,000	Vaa. River	100	100

PRICES OF SHARES AT LIVERPOOL.

PRICES OF SHARES AT LIVERPOOL.	
	£ s. d.
Liverpool Coal Gas.....	350 0 0
Liverpool New Gas & Coke Company.....	100 170 0 0
Liverp. New Shares, prem. 60	120 0 0
Liverp. & Har. W. Works	465 0 0
Booth ditto.....	310 0 0
Exchange Buildings.....	172 10 0
Liverp. & Manch. Railway	200 290 0 0
Ditto Old Quarters.....	25 71 10 0
Ditto New Quarters.....	25 71 0 0
Stockton & Darlington	100 248 0 0
Bolton & Leigh ditto.....	100 85 0 0
Ditto.....	25 21 0 0
Warrington & Wigan do. 100	150 0 0
Kerney & Leigh ditto.....	100 110 0 0
Wigan Branch ditto.....	70 10 0
Preston & Wigan North Union Line ditto.....	100 124 0 0
St. Helens and Runcorn Gap ditto.....	100 40 0 0
Leicester & Swanning do. 50	60 0 0
Manchest. Bolton, & Bury Railway and Canal.....	48 8 0 0
Grand Junction ditto.....	40 130 0 0
London & Birmingham. do. 50	140 0 0
Birming. & Gloucester do. 5	13 0 0
Manchester & Leeds do. 5	24 0 0
North Midland ditto.....	5 14 10 0
Midland ditto.....	5 10 0 0
Bank of Liverpool.....	10 27 0 0
Bank of Manchester.....	25 36 0 0
Manchester and Liverpool District Bank.....	15 22 10 0
Commercial Bank of Liver. 10	23 10 0
Liverp. Marine Assur. Co. 25	15 0 0
Oldf. Gas L. & Wat. Works	10 9 10 0
Marine Assurance Company	10 9 10 0
North & Central Bank of England.....	10 16 10 0
Union Bank of Liverpool. 10	15 5 0 0
Commercial Bank of Engl. 5	15 5 0 0
Treasury.....	3 15 0 0
Kilnawerrie.....	3 1 0 0
Lord, & Bright, (Rennie's)	2 2 0 0
Ditto & Stephenson's) 5	2 2 0 0
Great Western Railway) 10	2 2 0 0
Tradesman's Bank.....	57 0 0
United Trades ditto.....	57 0 0

PRICES OF METALS.

PRICES OF SHARES AT BIRMINGHAM.				AM.			
BANKING COMPANIES.				RAILWAYS.			
Birm'g. Banking Co.	5	0	17 5	Great Northern	5	0	1
Bank of Birmingham	10	0	15 0	North Midland	2	0	1
Commer. Bank of Engl.	5	0	7 0	Midland Counties	5	0	14
Northern and Central	10	0	17 0	Leeds and Manch	2	0	10
National Provincial	25	0	30 0	Lond. & Bright.	5	0	27
Dudley & Westbrom.	5	0	11 6	ditto ditto	(5/11)	5	0
Stowbridge & Kidderm.	5	0	12 2	Great North	(5/11)	2	0
Wolverhampton	5	0	10 10	Grand Can.	2	0	1
Warwick & Leamington	5	0	8 15	Lond. & England	2	0	4
Derby	5	0	7 5	London & Alex.	2	10	5
Leicester	15	0	22 0	Birm'g. & Greenw'ich	20	0	28
Gloucester	7	10	15 15	AS COMPANIES.			
CANALS.				Birmingham	50	0	100
Birmingham, 4th share	17	10	26 2	Do. and Staffs. & Shire	50	0	80
Birm'g. & Liver. Junct.	100	0	32 0	Dudley	20	0	22
Forester & Birmingham	75	0	32 0	Wolverhampton	20	0	45
Warwick & Birmingham	100	0	32 0	Birm'g. Equitable Gas	6	10	1
Warwick and Napton	100	0	0 0	MISCELLANEOUS.			
Dudley	100	0	0 0	Birm'g. Water Works	25	0	26
Staffords. & Worcester's	100	0	0 0	District Fire Office	2	0	2
Stafford-on-Avon	100	0	0 0	Broad-street Brewery	25	0	80
RAILWAYS.				Warstone-lane Brewery	5	0	5
London & Birm'g.	79	10	50 10	Derwick Borderley do.	2	0	3
Grand Junction	50	0	139 0	Lond. Steam Carr. Comp.	2	0	2
Gloucester & Birm'g.	60	0	126 0	Tin Plate	6	0	12
Dudley & Birm'g.	5	0	10 0	Bordesley Steel	6	10	10
Birm'g. & Wolverhampt.	2	10	2 10	Droitwich Salt	25	0	13
Great Western	5	0	14 0	British Iron	50	0	41
Birm'g. & Derby.	10	0	26 0	Birm. Plate & Crown Glass	1	0	2
Stafford & Exeter	2	10	8 5	Old Union Mill	1	0	1
Manchester & Liverp.	100	0	290 0	New Union Mill	1	10	1
				District Steel	1	10	1

PRICES OF METALS.

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		£	s.	d.					
COPPER, Brit.—Cake.....	ton	108	0	0	IRON, Brit.—Fig. No. 1....	ton	4		
Tile.....	do.	103	0	0	Bar ton 11 15 0 to 1				
Sheets.....	lb.	0	1	0	Do. Cast. in Wales 1				
Bottoms.....	do.	0	1	1	Bolts.....	ton	1		
Foreign—S. Am. (dy. 37s. cwt.).....	hd. ton	0	6	0	Nail Rods.....	ton	1		
TIN, Brit.—Blocks.....	cwt	5	15	0	Hoops.....	ton	1		
Bars.....	do.	5	17	0	Sheets, single.....	ton	1		
Plates, common { I.C. 2 2 0 to 2 6 0 to best, per { I.X. 2 8 0 „ 2 12 0 box. { L.X. 2 14 0 „ 2 18 0					(Others in proportion.)				
Wasters of the above Mk.s less, all others 6s. less					Foreign—Sweden, c. hd. ton 1				
(Others in proportion.)					For Steel, (var.)				
Foreign—Bancs, hd. cwt. 0 0 0					Duty 50s. mks. ton 14 0 0 to 3				
duty 50s. Straits, hd. cwt. 5 15 0					per ton. Russian com... ton 1				
per cwt. Bars, hd. cwt. 5 17 0					P.S.I..... ton 1				
LEAD, Brit.—Pig.....	ton	27	0	0	C.G.N.B. ton 1				
Sheet.....	ton	28	0	0	STEEL, Brit.—Blistered, various				
Shot.....	ton	30	10	0	quality, ton 25 0 0 to 4				
Red.....	ton	28	10	0	Shear do. do. 45 0 0 „ 8				
White (dry).....	ton	35	0	0	Cast do. do. 45 0 0 „ 8				
Do.(gd.in.oil).....	ton	38	0	0	Foreign—Sweden in kgs hd ton 1				
Litharge.....	ton	29	0	0	Duty 29 Do. Faggots hd. ton 1				
Foreign—Span. (dy. 40s. per ton).....	hd. ton	26	10	0	per cent. Milan..... hd. ton 1				
					SPYTER, For.—Cakes (dy. 2l. p. ton)..... hd. ton 1				
					Sheets (dy. 10d. p. ton)				
					hd. ton. 29 0 0 to 3				
					QUICKSILVER.—(dy. 1d. per lb.) hd. lb.				

TIDE TABLE.

HIGH WATER AT LONDON BRIDGE, from May 14 to May 30.

	Satur.	Sunday.	Mon.	Tuesd.	Wed.	Thurs.
Morning	1 20	1 34	2 29	2 56	3 29	4 1
Afternoon	1 38	2 10	2 40	3 12	3 44	4 18

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